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NASA'S UNCOSTED CARRYOVER

NASA's Uncosted Carryover, No. 60, ...

HEARING

BEFORE THE

SUBCOMMITTEE ON SPACE AND AERONAUTICS
OF THE

COMMITTEE ON SCIENCE
U.S. HOUSE OF REPRESENTATIVES
ONE HUNDRED FOURTH CONGRESS

SECOND SESSION

JULY 18, 1996

[No. 60]

Printed for the use of the Committee on Science



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NASA'S UNCLOSED CARRYOVER

THURSDAY, JULY 18, 1996

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE,
SUBCOMMITTEE ON SPACE AND AERONAUTICS,
Washington, DC.

The subcommittee met at 10:09 a.m. in Room 2318 of the Rayburn House Office Building, the Honorable F. James Sensenbrenner, Jr., chairman of the subcommittee, presiding.

Chairman SENSENBRENNER. The subcommittee will be in order.

And, without objection, the chair is granted recess authority to recess the subcommittee during roll calls.

Let me welcome our witnesses this morning and say at the outset that I think this will be a very constructive hearing. In particular, I want to express the committee's appreciation to Mr. Goldin for testifying so soon after returning from Russia.

From the reports we have seen so far, Mr. Goldin made progress on some of the space station issues which have concerned this committee. We all look forward to hearing about that trip at some later date.

For now, we are going to focus on the issue of financial management at NASA and the tendency of some programs to build up large balances of unspent funds by requesting more money than they plan to spend in any given year. A little over three months ago, the General Accounting Office inadvertently discovered that NASA's Mission to Planet Earth account carried forward some \$695 million in unspent funds from fiscal year 1995 into fiscal year 1996.

In the fiscal language of Washington, we call these funds unclosed, meaning that the agency has not requested the Treasury to issue checks for work done under NASA's auspices. As it turns out, that's largely because the work hasn't been done.

When we speak of unclosed carryover, we are dealing with the dollars that NASA has left over at the end of the fiscal year after it has paid all the bills it incurred during that year. The unspent balance is carried forward and added to the funds that the agency receives for the next year.

At this point, the agency has more resources available to spend in a single year than it requested for its needs either to the President or to Congress. Consequently, several programs have built up very large levels of unclosed carryover and have as much as two years for their annual budget to spend in a single year.

I asked Mr. Goldin about this issue at an April hearing before the subcommittee and then requested the GAO to launch a thor-

ough audit of this problem. It seems reasonable to expect that NASA would, and should, have some carryover funds and uncosted funds from year to year.

But, the question becomes how much is appropriate. Could it really be acceptable that Mission to Planet Earth didn't spend 55 percent of its 1995 budget?

Shortly after the hearing with Mr. Goldin, the NASA comptroller sent a memo throughout the agency telling associate administrators to be prepared to justify any uncosted balances over 15 percent of their annual budget. For example, if a program's budget is \$100 million, it would have to justify any unspent funds over \$15 million.

In June, the Johnson Space Center's comptroller released a report that indicated that uncosted balances should be about 25 percent of a program's budget. So, we have two rough benchmarks from NASA, 15 percent and 25 percent.

Unfortunately, the unspent balance in Mission to Planet Earth was 55 percent. Very clearly, something is amiss.

Some proponents of Mission to Planet Earth argued that we should ignore this problem and accused Republicans of cynically using it to attack the program. That's a shame, because it diverts attention from the real issue, which is fiscal responsibility and good management of the taxpayers' money.

When I requested GAO to look into this issue, I asked them to examine the problem throughout NASA and not just confined to Mission to Planet Earth. We started with Mission to Planet Earth, because that's the program we knew the most about.

GAO found that Mission to Planet Earth is just the tip of the iceberg. Agency-wide, NASA carried forward some \$3.6 billion in unspent funds from fiscal 1995 into fiscal 1996.

Some programs fared better than others. Station Shuttle and Aeronautics had their uncosted funding under control. Unfortunately, in addition to Mission to Planet Earth's 55 percent carryover, GAO found that Space Science didn't spend 43 percent of its budget; Life and Microgravity research carried forward 70 percent of its budget; and, academic programs carried forward 135 percent of their budget.

So far, the GAO has traced this problem back to 1989 and discovered that it will continue at least through the beginning of 1998. Clearly, NASA isn't yet the lean mean fighting machine we have been led to believe it can be.

Instead, some programs seem to resemble the common couch potato, which consumes more resources than it uses. Make no mistake about it, this is a very serious issue.

It raises issues of congressional oversight and fiscal management inside NASA. It also raises questions of trust.

We've heard too many times that the agency can't afford any more cuts to its annual budget request without doing serious damage to its programs. Now, we find the agency is not spending all the money the taxpayers intrust to it from one year to the next.

With this history of asking for more than it plans to spend, how much trust should we put in NASA's next budget request to Congress? And, if we can't trust NASA with our money, how can we trust it with our future?

During this hearing, we will begin learning why some programs have built up such large unspent balances and why their budget requests have not been adjusted downward to take these unspent funds into consideration. NASA has offered several explanations which we will examine today.

But, I expect the GAO to continue its efforts to determine the validity of these explanations in the coming months. One thing in particular concerns me—the possibility that some within the agency allowed these balances to accumulate as a hedge against cuts in out-year budgets.

The Johnson Space Center's recent review reported that "the agency is intentionally underrunning the current year to offset future reductions." That sounds dangerously close to padding budget requests now in order to build up funding that would enable NASA to escape future fiscal policy direction from the American people through the Congress and through the White House.

I expect the GAO to pay particular attention to this possibility as it continues its analysis.

From now on, I expect NASA to provide information about its spending and cost plans to this committee in addition to its budget request. And, I expect the budget request to accurately reflect the agency's spending plans and needs.

When GAO completes its testimony this morning, NASA's administrator will testify before the committee about the actions he is undertaking to correct this problem. According to his statements last April, Mr. Goldin only recently learned about this practice and was as unhappy with it as we are. I respect that.

I believe the administrator can and will fix this problem. He has already improved many agency practices in what has been a very difficult period.

So, I look forward to hearing his plans for tackling this one. And, I plan to work with him and other members of this committee and the Appropriations Committee to correct this situation.

Mr. Hall.

Mr. HALL. Mr. Chairman, thank you very much. And, I am running a little late this morning.

I forget that I am not chairman of this thing anymore. But, I remember having to be on time and how it irritated me when others drug in late.

But, I am glad to be here. And, I certainly welcome our witnesses to this hearing and certainly Administrator Goldin back from his trip to Russia.

That's a tough trip, a hard trip. I was there just a couple of weeks, I think, before you were. And, I think we will be gentle on you today to give you a chance to rest up.

I also want to thank the chairman. I thank my friend, Mr. Sensenbrenner, for calling this hearing.

It's very clear that we need to understand how taxpayers' money is being spent. And, if there is anyway that we can improve it on the congressional part, we have to do that. We have to work at that.

And, I hope our witnesses will be able to shed some additional light on what sometimes appears to be a pretty arcane financial discussion. We need to hear today—as I look at the testimony,

there appears to be an agreement between NASA and GAO on the carryover balances. And, I think that's one of the major things that we are talking about, that they are inevitable, I'm sorry to say, and they are probably an appropriate part of the budgeting process.

It also appears that both agencies believe that it's important to understand what levels of carryover are appropriate. And, as part of that review, I think it's important that we examine the experience of all the other agencies of the federal government.

And, as should be expected, carryover balances are not unique to NASA. And, the existence of such balances is not necessarily bad.

I'm also reassured by the testimony that while there may be areas in which financial management practices can be improved, GAO has not reported any evidence of fraud or of abuse—I almost apologize for using those words—in NASA's carryover balances. No NASA program is maintaining secret funds or abusing the public. I think that's an important conclusion and one that needs to be emphasized in the light of some of the earlier questions that were raised about NASA's carryover balances.

Finally, I think it's hard to escape the conclusion that all of the budgetary uncertainty that has confronted NASA over the last several years has had an impact on the level of carryover balances. As I've said before, NASA has met the challenge of cutting its budget and streamlining its programs.

I don't know of any other entity under the dome here that has done the job that they have done in the time that they've done it. In turn, I think we still need to give NASA the budgetary stability it requires to continue to deliver a world-class space program.

And, I think we need to remember—I've done a little checking on information from the Congressional Research that evidences that the Office of the Secretary of Defense had—the Ballistic Missile Defense—well, the Office of the Secretary of Defense also had an accounting system of 48 percent unexpended and 6.5 percent unobligated. The other is 47 percent with 5.3 percent unobligated.

I don't find that that's unusual. I'm not saying it's ideal.

But, we live in a real world up here. And, as long as we can account for it and we are making every dollar count, I think the hearing is good, Mr. Chairman.

And, I thank you for having it.

Chairman SENSENBRENNER. Thank you very much, Mr. Hall.

The first panel this morning will be from the General Accounting Office. And, with us today are Thomas J. Schulz, associate director of the National Security and International Affairs Division of GAO, who is accompanied by Frank Degnan, who is an associate director and Richard Eiserman, who is the evaluator in charge on this project.

Mr. Schulz, you are recognized. You can proceed at will.

I think it probably will be best if you can wrap up what you have to say orally in five to ten minutes, because we are going to be coming up upon a vote pretty soon. And, we don't want to split your testimony up.

Thank you.

**STATEMENT OF THOMAS J. SCHULZ, ASSOCIATE DIRECTOR,
DEFENSE ACQUISITIONS ISSUES, NATIONAL SECURITY AND
INTERNATIONAL AFFAIRS DIVISION, GENERAL ACCOUNTING
OFFICE**

Mr. SCHULZ. Thank you, Mr. Chairman. I have timed myself a couple of times. I'm under five minutes, Mr. Chairman.

We are pleased to be here today to discuss NASA's carryover balances. In March of this year, Mr. Chairman, you did express concern about the extent of such balances for Mission to Planet Earth and other programs.

Our recent report to you, which is attached to my statement, presents basic information on carryover balances for the Mission to Planet Earth and other programs in NASA's Human Space Flight and Science, Aeronautics and Technology appropriations for three years—fiscal years 1995, 1996 and 1997. The purpose of my testimony today is to place the report in context.

Specifically, we want to focus on how important it is—and I think both yours and Mr. Hall's statements are doing the same thing—to use information on carryover balances when considering NASA's request for new budget authority. We also think it's important for us that we continue to review NASA's budget requests.

Simply stated, while assessing NASA's requests for new budget authority and determining what adjustments, if any, to make to that request, the focus should be on the total resources NASA has available for the next fiscal year, not just the amount requested. Carryover balances, which represent available budgetary resources from prior years, along with new budget authority, provide the total budget resources available to the program.

And, you've both indicated—and we reinforce—some level of carryover balance is appropriate for government programs. Table 1 in the report shows that carryover balances represent a significant portion of total budgetary authority.

For example, at the start of fiscal year 1996, NASA's carryover balances for its Human Space Flight and its Science, Aeronautics and Technology programs totaled \$3.6 billion, about a quarter of all the budgetary resources available to those programs during that fiscal year, which was about \$15 billion.

To illustrate how significant carryover balances can be as part of the total budget resources available, we are going to look at the Mission to Planet Earth program, which is the one that you initially requested we do so. I think I have trouble following all the numbers in my statement, but it would be helpful if you would want to turn to page 5 of the attached testimony. And, I can kind of walk you through it very quickly—excuse me, of the attached report.

It's on Table 2. And, about halfway down, you will see the line for Mission to Planet Earth.

When you look at that, you will see that NASA has requested about \$1,402 billion—it's not "about;" that is what they requested—for the program for fiscal year 1997. If approved, this would provide about two-thirds of the about \$2.06 billion total budget authority available to the program in 1997. The other third is nearly \$654 million that NASA estimated would be carried over from that fiscal year, 1996.

Therefore, the request for the \$1.402 billion in new authority really is part of the larger question of how NASA will spend and use \$2.06 billion in budgetary resources for fiscal year 1997. Now, part of the answer to that question is the amount of costs that will be incurred for the work performed in 1997.

NASA estimates such costs at \$1.425 billion, which would leave close to \$631 million to be carried into fiscal year 1998. As we look at the current budget, the question for NASA and the committee is whether \$631 million should be carried over as part of acceptable and normal operations of this program.

Or, a related question is how much, if any, should be rolled over for costs anticipated beyond the current budget year. And, as the table shows, and, as you've mentioned, Mr. Chairman, there are several NASA programs with large carryover balances where these questions probably need to be addressed.

Now, our report notes some reasons NASA has given us as to why these balances have accumulated over the years. And, I think we will hear from NASA about those later.

But, we talked about such things as untimely close out of grant agreements, long-term phasing of obligations, et cetera. Again, while we agree that some level of carryover balance is appropriate for government programs, the question is how much.

And, to address that question, more in-depth review is needed on the justifications for carryover balance in order to provide the context for assessing what those are. For example, we are aware of, in one case, a portion of a program's carryover balance which was part of a strategy to accumulate budget authority in earlier years of a project to cover later years when high levels of costs will be incurred without having to request increases in budget authority at the time of those increases.

There are indications that this practice, referred to as "banking," may occur in other NASA activities. Given that the program can annually request and receive new authority, significant carryover balances are a reason for discussion, and they are a trigger for GAO reviews, on how much future work to fund in the pending budget request and how much in future budget request.

Annual appropriations have long been a basic means of exerting and enforcing congressional policy.

You are not alone, Mr. Chairman, regarding your concern about the size of NASA's carryover balances. NASA is concerned that the current amounts of carryover are too high and is taking action to reduce its balances.

The NASA chief financial officer's study of carryover balances established a threshold for the amounts of carryover and recommended actions to bring NASA programs within that threshold. Also, the NASA comptroller has taken action to scrutinize carryover amounts as part of the fiscal year 1998 budget development process. These are good first steps to help gain an understanding of the issues.

So, NASA has shown that it is paying more attention to the carryover balances. It has not yet reached the point where it fully understands the individual program's carryover balances and what each program's carryover threshold could or should be.

NASA will have to make some decisions on how to develop and enforce those changes. We intend to follow the agency's progress.

We believe that your interest in this matter, Mr. Chairman, and this hearing focuses attention on an important matter for deliberations on NASA's budget request.

So, this completes my statement, Mr. Chairman. I think I made it within five minutes.

And, my colleagues, Frank Degnan, who is GAO's expert on NASA's activities, and Mr. Eiserman, who conducted the review, will be happy to answer any questions you may have.

[The prepared statement and attachment of Mr. Schulz follows:]

United States General Accounting Office

GAO

Testimony

Before the Subcommittee on Space and Aeronautics,
Committee on Science, House of Representatives

For Release on Delivery
Expected at
10:00 a.m., EST
Thursday
July 18, 1996

NASA BUDGET

Carryover Balances in
Selected Programs

Statement of Thomas J. Schulz, Associate Director, Defense
Acquisitions Issues, National Security and International Affairs
Division



Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss the National Aeronautics and Space Administration's (NASA) carryover balances. In March of this year, Mr. Chairman, you expressed concern about the extent of such balances for Mission to Planet Earth and other programs. Our recent report to you is attached to this statement.¹ The report presents basic information on carryover balances for Mission to Planet Earth and other programs in NASA's Human Space Flight and Science, Aeronautics, and Technology appropriations for fiscal years 1995, 1996, and 1997. The report (1) defines carryover balance and its uncosted components, (2) analyzes Mission to Planet Earth's carryover balances in relation to NASA's other programs, and (3) describes NASA's reaction to high carryover balances in many of its programs.

The purpose of our testimony today is to place the report in context. Specifically, we want to focus on how important it is to use information on carryover balances when considering NASA's request for new budget authority. There are also issues we believe warrant further review as part of our basic legislative responsibility.

Simply stated, while assessing NASA's requests for new budget authority and determining what adjustments, if any, to make to that request, the focus should be on the total resources NASA has available for the next fiscal year, not just the amount requested. Carryover balances, which represent available budgetary resources from prior years, along with new budget authority, provide the total budget resources available to a program. Some level of carryover balance is appropriate for government programs. Table 1

¹NASA Budget: Carryover Balances for Selected Programs (GAO/NSIAD-96-206, July 16, 1996).

in our report shows that carryover balances represent a significant portion of total budgetary authority. For example, at the start of fiscal year 1996, NASA's carryover balances for its Human Space Flight and Science, Aeronautics, and Technology programs totaled \$3.6 billion--about a quarter of all the budgetary resources available to those programs during that fiscal year.

Carryover balances consist of uncosted obligations and unobligated funds. Uncosted obligations represent the portion of its authority that NASA has obligated for goods and services but for which it has not yet incurred costs. Funding provided for NASA's Human Space Flight and Science, Aeronautics and Technology programs is available for obligation over a 2-year period. In such circumstances, some funds are expected to be obligated during the second year of availability. NASA officials pointed out that funds carried over will eventually be expended to cover program costs.

To illustrate how significant carryover balances can be as part of total budget resources available, let's look at the Mission to Planet Earth program. We see that NASA requested \$1.402 billion for the program for fiscal year 1997. If approved, this would provide about two-thirds of the \$2.1-billion total budget authority available to the program in 1997. The other third is the nearly \$654 million that NASA estimated would be carried over from fiscal year 1996. Therefore, the request for \$1.402 billion in new authority really is part of the larger question of how NASA will use \$2.1 billion in budgetary resources in fiscal year 1997. Part of the answer is the amount of costs that will be incurred for work performed in fiscal year 1997. NASA estimates such costs at \$1.425 billion, which would leave close to \$631 million to be carried into fiscal year 1998. The question for NASA and the Committee is whether \$631 million should be carried over as part of acceptable operations of this program. A related question is

how much, if any, should be rolled over for costs anticipated beyond the current budget year? There are several NASA programs with large carryover balances where these questions need to be addressed.

Our report notes some reasons NASA has given as to why these balances have accumulated over the years. Again, while we agree that some level of carryover balance is appropriate for government programs, more in-depth review is needed on the justifications for carryover balances in order to provide the context for assessing these balances. For example, in one case, a NASA official told us that a portion of a program's carryover balance was part of a strategy to accumulate budget authority in earlier years of a project to cover later years when high levels of costs will be incurred, without having to request increases in budget authority at that time. There are indications that this practice, referred to as "banking" by that official, may occur in other NASA activities. Given that the program can annually request and receive new authority, significant carryover balances are a reason for discussion on how much future work to fund in the pending budget request, and how much in future budget requests.

Mr. Chairman, you are not alone regarding your concern about the size of NASA's carryover balances. NASA is also concerned that the current amounts of carryover are too high and is taking action to reduce the balances. We are specifically referring to the recent NASA Chief Financial Officer's study of carryover balances that established threshold for amounts of carryover and recommended actions to bring NASA programs within that threshold. The study noted that the threshold needs to be studied over time to determine if it is appropriate. Our report also notes the NASA Comptroller's actions to scrutinize carryover amounts as part of the fiscal year 1998 budget development process. These are good first steps to help gain an understanding of the issues.

NASA has shown that it is paying more attention to carryover balances. However, NASA has not yet reached the point where it fully understands individual programs' carryover balances and what each program's carryover threshold could or should be. The agency at some time will have to make decisions on how to develop and enforce appropriate changes. We intend to follow the agency's progress in developing and implementing these changes. We believe that this hearing will help focus attention on an important matter for consideration during deliberations on NASA's budget request.

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This completes my statement, Mr. Chairman. My colleagues and I will be happy to respond to any questions you or Members of the Subcommittee may have at this time.

(707189)

GAO

United States General Accounting Office

Report to the Chairman, Subcommittee on
Space and Aeronautics, Committee on Science
House of Representatives

July 1996

NASA BUDGET**Carryover** Balances for Selected Programs

GAO/NSIAD-96-206

Printed copies of this document will be available shortly.

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GAO Form 171 (12/87)



United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-272539

July 16, 1996

The Honorable F. James Sensenbrenner, Jr.
Chairman, Subcommittee on Space and Aeronautics
Committee on Science
House of Representatives

Dear Mr. Chairman:

In March 1996, you raised concerns in an oversight hearing and a letter to us about the extent of carryover balances for the Mission to Planet Earth (MTPE) and other National Aeronautics and Space Administration (NASA) programs. This report discusses MTPE's carryover, as well as that of other NASA programs, and describes NASA's plans to reduce those balances. We plan to continue reviewing NASA's carryover, as part of our basic legislative responsibilities, to fully understand the nature of these balances and how they should be considered in the budget process.

BACKGROUND

Carryover balances consist of unobligated funds and uncosted obligations. Each fiscal year, NASA requests obligational authority from the Congress to meet the costs of running its programs. Once NASA receives this authority, it can obligate funds by placing orders or awarding contracts for goods and services that will require payment during the same fiscal year or in the future. Unobligated balances represent the portion of its authority that NASA has not obligated. Uncosted obligations represent the portion of its authority that NASA has obligated for goods and services but for which it has not yet incurred costs.

Through the annual authorization and appropriations process, Congress determines the purposes for which public funds may be used and sets the amounts and time period for which funds will be available. Funding provided for NASA's Human Space Flight and Science, Aeronautics and Technology programs is available for obligation over a 2-year period. Authority to obligate any remaining unobligated balances expires at the end of the 2-year period. Five years later, outstanding obligations are canceled and the expired account is closed.

Some level of carryover balance is appropriate for government programs. In particular, NASA's Human Space Flight and Science, Aeronautics and Technology appropriations are available for obligation over a 2-year period. In such circumstances, some funds are expected to be obligated during the second year of availability. Funds must travel through a series of approvals at headquarters and

B-272539

the field centers before the money is actually put on contracts so that work can be performed. According to NASA officials, it can be difficult to obligate funds that are released late in the year. In addition, the award of contracts and grants may sometimes be delayed. Once contracts and grants are awarded, costs may not be incurred or reported for some time thereafter. Expenditures, especially final payments on contract or grant closeouts, will lag still further behind. Finally, costs and expenditures for a multiyear contract or grant will be paced throughout the life of the contract. For these reasons, all NASA programs have carryover balances. The unobligated balances expire at the end of their period of availability, and according to NASA officials, uncosted obligations carried over will eventually be expended to cover contract costs.

RESULTS IN BRIEF

Carryover balances in NASA's Human Space Flight and Science, Aeronautics, and Technology programs totaled \$3.6 billion by the end of fiscal year 1995. NASA also refers to carryover balances in terms of the equivalent months of funding for a fiscal year. In other words, almost 4 months or one-third of the budget authority provided to these programs in fiscal year 1995 would be used to cover costs that will accrue in fiscal year 1996 or later. Individual programs carried over varying amounts, ranging from the equivalent of 1 month to 16 months of fiscal year 1995 new budget authority. MTPE carried \$695 million, or more than 6 months, of budget authority into fiscal year 1996. Under NASA's current budget and cost plans, these balances will be reduced in fiscal years 1996 and 1997, but the actual reductions depend on (1) the extent NASA's projected costs match the actual costs incurred and (2) the amount of new budget authority received for fiscal year 1997.

NASA officials are concerned that the current amounts are too high and are taking actions to reduce these balances. Although there are valid reasons to have carryover, the issue is how much. A recent NASA study of carryover balances determined that the equivalent of 3 months of budget authority should be carried into the next fiscal year and recommended actions to bring NASA programs within that threshold. The study noted that the threshold needs to be studied over time to determine if it is appropriate. Applying the initial 3-month threshold to estimated carryover balances at the end of fiscal year 1996 shows that 7 of the 11 Human Space Flight and Science, Aeronautics and Technology programs have total carryover of \$1.1 billion beyond the threshold. Most of the carryover beyond the threshold was in three programs: Space Science with \$379 million, MTPE with \$341 million, and Life and Microgravity Sciences and Applications with \$228 million.

NASA's Comptroller also intends to carefully scrutinize carryover amounts as part of the fiscal year 1998 budget development process. The Comptroller formally requested program managers to justify carryover balances that exceed amounts necessary to fund program costs for 8 weeks of the next fiscal year. The 8 weeks was not a threshold for the appropriate level of carryover, but rather a criteria for

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identifying balances for review. At the end of fiscal year 1996, nine programs would need to justify \$1.5 billion beyond the Comptroller's 8-week criteria. The three programs with the largest estimated balances requiring justification are Space Science with \$558 million, Mission to Planet Earth with \$435 million, and Life and Microgravity Sciences and Applications with \$257 million.

PROGRAM CARRYOVER BALANCES VARY SIGNIFICANTLY

Carryover balances at the end of fiscal year 1995 for Human Space Flight and Science, Aeronautics and Technology programs totaled \$3.6 billion. Of this amount, \$2.7 billion was obligated but not costed and \$0.9 billion was unobligated. Table 1 shows the carryover balances by program. The balance carried over from fiscal year 1995 plus the new budget authority in fiscal year 1996 provides a program's total budget authority. The total budget authority less the planned costs results in the estimated balance at the end of fiscal year 1996. Table 2 starts with the carryover from fiscal year 1996 and ends with the balance that NASA estimates will carry over from fiscal year 1997 into 1998. The cost plans shown in the tables reflect the amount of costs estimated to be accrued during the fiscal year. The carryover balances will change if actual cost and budget amounts differ from projections. NASA program officials are in the process of updating their 1996 cost plan estimates. Officials in some programs now expect the actual costs to be less than planned, resulting in higher carryover balances at the end of 1996 than those shown in the table.

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Table 1: Estimated Carryover Balances in Human Spaceflight and Science, Aeronautics, and Technology Programs at the End of Fiscal Years 1995 and 1996

Dollars in millions

	Actual carryover balance (9/30/95)	Fiscal year 1996 new budget authority	Estimated total budget authority	Fiscal year 1996 cost plan	Estimated carryover balance (9/30/96)
Human Space Flight					
Space Station	\$368.4	\$1,863.6	\$2,232.0	\$2,162.4	\$69.6
U.S.-Russian Cooperative Program	133.0	129.2	262.2	218.1	44.1
Space Shuttle	332.9	3,148.8	3,481.7	3,329.8	151.9
Payload Utilization and Operations	114.5	315.0	429.5	339.8	89.7
Total	\$948.8	\$5,456.6	\$6,405.4	\$6,050.1	\$355.3
Science, Aeronautics and Technology					
Space Science	\$769.2	\$2,007.6	\$2,776.8	\$1,895.9	\$880.9
Life and Microgravity Sciences and Applications	323.3	488.5	811.8	461.6	350.2
Mission to Planet Earth	694.9	1,250.1	1,945.0	1,291.2	653.8
Aeronautical Research and Technology	212.4	877.3	1,089.7	871.8	217.9
Space Access and Technology	254.1	678.9	933.0	762.0	171.0
Academic Programs	138.1	102.2	240.3	135.0	105.3
Mission Communication Services	128.2	441.3	569.5	490.6	78.9
Total	\$2,676.4*	\$5,845.9	\$8,522.3*	\$6,064.3*	\$2,458.0
Total	\$3,625.2	\$11,302.5	\$14,927.7	\$12,114.4	\$2,813.3

*Includes \$156.2 million for launch services in fiscal year 1995. After fiscal year 1995, NASA's budget does not include a separate line for launch services.

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Table 2: Estimated Carryover Balances in Human Spaceflight and Science, Aeronautics, and Technology Programs at the End of Fiscal Years 1996 and 1997

Dollars in millions

	Estimated carryover balance (9/30/96)	Fiscal year 1997 budget request	Estimated total budget authority	Fiscal year 1997 cost plan	Estimated carryover balance (9/30/97)
Human Space Flight					
Space Station	\$69.6	\$1,802.0	\$1,871.6	\$1,803.0	\$68.6
U.S./Russian Cooperative Program	44.1	138.2	182.3	164.0	18.3
Space Shuttle	151.9	3,150.9	3,302.8	3,164.0	138.8
Payload Utilization and Operations	89.7	271.8	361.5	292.0	69.5
Total	\$355.3	\$5,362.9	\$5,718.2	\$5,423.0	\$295.2
Science, Aeronautics and Technology					
Space Science	\$880.9	\$1,857.3	\$2,738.2	\$2,099.0	\$639.2
Life and Microgravity Sciences and Applications	350.2	498.5	848.7	609.0	239.7
Mission to Planet Earth	653.8	1,402.1	2,055.9	1,425.0	630.9
Aeronautical Research and Technology	217.9	857.8	1,075.7	947.0	128.7
Space Access and Technology	171.0	725.0	896.0	741.0	155.0
Academic Programs	105.3	100.8	206.1	106.0	100.1
Mission Communication Services	78.9	420.6	499.5	440.0	59.5
Total	\$2,458.0	\$5,862.1	\$8,320.1	\$6,367.0	\$1,953.1
Total	\$2,813.3	\$11,225.0	\$14,038.3	\$11,790.0	\$2,248.3

NASA often discusses and analyzes carryover balances in terms of equivalent months of a fiscal year's budget authority that will be carried into the next fiscal year. For example, the Aeronautical Research and Technology carryover balance of \$217.9 million at the end of fiscal year 1996 is equivalent to 3 months of the \$877.3

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million new budget authority, based on an average monthly rate of \$73.1 million. Table 3 shows each program's carryover in equivalent months of budget authority.

Table 3: Months of Carryover at the End of Fiscal Years 1995, 1996, and 1997

	Total months of carryover		
	Fiscal year 1995 actual	Fiscal year 1996 estimated	Fiscal year 1997 estimated
Human Space Flight			
Space Station	2.3	0.4	0.5
U.S.-Russian Cooperative Program	10.6	4.1	1.6
Space Shuttle	1.3	0.6	0.5
Payload Utilization and Operations	4.3	3.4	3.1
Science, Aeronautics and Technology			
Space Science	5.2	5.3	4.1
Life and Microgravity Sciences and Applications	8.3	8.6	5.8
Mission to Planet Earth	6.6	6.3	5.4
Aeronautical Research and Technology	2.9	3.0	1.8
Space Access and Technology	5.0	3.0	2.6
Academic Programs	16.2	12.4	11.9
Mission Communications Services	3.2	2.1	1.7

The carryover balances at the end of fiscal year 1995 ranged from the equivalent of 1 month for the Space Shuttle to 16 months for Academic Programs. NASA officials gave several overall reasons for the large relative differences in carryover amounts. One major reason was that programs such as Space Station and Space Shuttle, which have fewer months of carryover, prepare budgets based on the amount of work estimated to be costed in a fiscal year. Other programs, such as MTPE and Space Science, have based their budgets on the phasing of obligations over a number of fiscal years. Another major reason given was that some programs fund a substantial number of grants, which are typically funded for a 12-month period regardless of what point in the fiscal year they are awarded. This practice, coupled with slow reporting and processing of grant costs, contributes to higher carryover balances. Science programs such as MTPE, Space Science, and Life and Microgravity Sciences and Applications, fund grants to a much greater extent than

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Space Station and Space Shuttle. NASA officials also said the size of contractors affects carryover balances, with larger contractors requiring less funding into next year than smaller contractors.

MTPE's Large Carryover Caused
By Program Redirection and Grants

NASA officials gave two major reasons for MTPE's carryover balance at the end of fiscal year 1995. First, the MTPE program has undergone several major restructurings since its inception in 1991. During the periods when the content of the program was being changed, selected program activities were restrained until the new baseline program was established. Since several contract start dates were delayed, the carryover balance grew. MTPE officials emphasized that all work for which funding was provided would be performed in accordance with the approved baseline and that, in most cases, the new baseline included the same end dates for major missions and ground systems. Officials expect the balances to decrease as delayed work is accomplished. The second reason given for the large carryover balance at the end of fiscal year 1995 is the large number of grants funded in the MTPE program. As discussed earlier, the process for awarding grants and delays in reporting costs on grants contributes to carryover balances.

Aeronautical Research and Technology
Program Closely Manages Carryover Balance

Officials from the Aeronautical Research and Technology program attributed their relatively low level of carryover to aggressively managing carryover balances. Officials have studied their carryover balances in detail and have greatly reduced their levels. In 1989, the program had a carryover balance of 43 percent, equivalent to 5 months of funding. Program financial managers analyzed their carryover and determined that it could be reduced substantially. By 1992, the carryover balance was about 25 percent, or 3 months, of new budget authority, and it is estimated to remain at that level through fiscal year 1996. In fiscal year 1997, program managers hope to achieve a 15-percent, or 2-month, carryover level. Officials attributed their improved performance to thoroughly understanding their carryover balances, emphasizing work to be accomplished and costed in preparing budgets, and carefully tracking of projects' performance. They believe that some of their methods and systems for managing carryover balances could be applied to other NASA programs.

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NASA IS TAKING ACTIONS TO ANALYZE REDUCE CARRYOVER BALANCES

Although carryover naturally occurs in the federal budget process, NASA officials became concerned that the balances were too high. NASA is taking actions to analyze and reduce these balances. NASA's Chief Financial Officer directed a study that recommended changes to reduce carryover balances. NASA's Comptroller will review justifications for carryover balances as part of the fiscal year 1998 budget development process.

NASA Recently Studied Carryover Balances

A NASA steering group was tasked by NASA's Chief Financial Officer to review carryover balances as part of a study¹ to address the agency's increasing level of unliquidated budget authority.² The study identified a number of reasons for the current balances, including NASA's current method of obligations-based budgeting, reserves held for major programs, delays in awarding contractual instruments, late receipt of funding issued to the centers, and grant reporting delays. The study recommended a number of actions to reduce carryover balances through improved budgeting, procurement, and financial management practices, including implementing cost-based budgeting throughout the agency and establishing thresholds for carryover balances.

According to the study, cost-based budgeting takes into account the estimated level of cost to be incurred in a given fiscal year as well as unused obligation authority from prior years when developing a budget. The organization then goes forward with its budget based on new obligation authority and a level of proposed funding that is integrally tied to the amount of work that can be done realistically over the course of the fiscal year. However, the study cautioned that a cost-based budgeting strategy should recognize that cost plans are rarely implemented without changes. Therefore, program managers should have the ability to deal with contingencies by having some financial reserves.

The study recommended that NASA implement thresholds for the amount of funds to be carried over from one fiscal year to the next. NASA had about 4 months of carryover at the end of fiscal year 1995, according to the study. It recommended

¹The Management and Liquidation of Budget Authority: Issues and Recommendations Associated With Recent Growth in Unliquidated Budget Authority, National Aeronautics and Space Administration (June 5, 1996).

²In addition to unobligated funds and uncosted obligations, total unliquidated budget authority includes accounts payable where work has been performed and costed, but not yet paid for.

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that the agency implement a threshold of 3 months for total carryover: 2 months of uncosted obligations for forward funding on contracts and 1 month of unobligated balance for reserves. The study noted that carryover balances should be reviewed over the next several years to determine if this threshold is realistic. NASA's Chief Financial Officer said the next logical step is to analyze balances in individual programs in more depth. We agree that the appropriateness of the threshold should be examined over time and that further study is needed to more fully understand carryover balances in individual programs.

We also believe that individual programs must be measured against an appropriate standard. One problem with looking at carryover balances in the aggregate is that programs substantially under the threshold in effect mask large carryover balances in other programs. For example, at the end of fiscal year 1996, the total amount of carryover in excess of 3 months for seven programs is estimated to be \$1.05 billion. However, the carryover balance for the space shuttle and space station programs in the same year is estimated to be \$1.03 billion under the threshold, which almost completely offsets the excess amount. We compared the balances of individual Human Space Flight and Science, Aeronautics, and Technology programs to this 3 month threshold and found that at the end of fiscal year 1995, nine programs exceeded the threshold by a total of \$1.3 billion. By the end of fiscal year 1997, only four programs are expected to significantly exceed the threshold by a total of \$0.6 billion. Table 4 compares individual program carryover amounts with the 3 month threshold at the end of fiscal years 1995, 1996, and 1997. As mentioned earlier, the estimates are based on projected costs for fiscal year 1996 and projected budgets and costs for fiscal year 1997. If actual costs and budgets are different, the amount of carryover exceeding the threshold will change.

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Table 4: Carryover in Excess of 3 Months at the End of Fiscal Years 1995, 1996 and 1997

Dollars in Millions

	Carryover in excess of 3 months		
	Fiscal year 1995 actual	Fiscal year 1996 estimated	Fiscal year 1997 estimated
Human Space Flight			
Space Station	a	a	a
U.S.-Russian Cooperative Program	\$95.5	\$11.8	a
Space Shuttle	a	a	a
Payload Utilization and Operations	34.5	11.0	\$1.6
Total	\$130.0	\$22.8	\$1.6
Science, Aeronautics and Technology			
Space Science	\$325.0	\$379.0	\$174.9
Life and Microgravity Sciences and Applications	206.5	228.1	115.1
Mission to Planet Earth	379.6	341.3	280.4
Aeronautical Research and Technology	a	a	a
Space Access and Technology	102.8	1.3	a
Academic Programs	112.6	79.8	74.9
Mission Communications Services	7.9	a	a
Total	\$1,206.9^b	\$1,029.4	\$645.2
Total	\$1,336.8	\$1,052.1	\$646.8

^aIndicates that a program's carryover balance was less than the 3-month threshold.

^bIncludes \$72.7 million for launch services in fiscal year 1995. After fiscal year 1995, NASA's budget does not include a separate line for launch services.

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NASA's Comptroller Will Review Justifications for Carryover Balances

The NASA Comptroller is planning to review carryover balances in each program. According to the Comptroller and program financial managers, carryover balances have always been considered a part of the budget formulation process, but factoring them into the process is difficult since budget submissions must be prepared well before the actual carryover balances are known. For example, NASA's fiscal year 1997 budget request was prepared in the summer of 1995 and submitted to the Office of Management and Budget in the fall. At that point, NASA's appropriations for fiscal year 1996 were not final and costs for 1996 could only be estimated.

Until now, appropriate levels of carryover and justifications for carryover have not been reviewed in depth. The NASA Comptroller included the following guidance on carryover balances in his April 1996 letter to program associate administrators on preparation of the fiscal year 1998 budget:

"Estimates of budget authority, obligations, and accrued costs of program activities will be specifically scrutinized to ensure that the timing of the budget authority to accrued costs is consistent with minimal, carefully justified balances of uncosted budget authorities at fiscal year end. Carryover of uncosted balances in excess of eight weeks of cost into the next fiscal year will have to be specifically justified."

The carryover referred to by the Comptroller is the equivalent of 8 weeks, or 15 percent, of the next fiscal year's cost. For example, the fiscal year 1996 budget, factoring in carryover from the prior years, should include enough budget authority to cover all costs in 1996 plus 8 weeks of costs in fiscal year 1997. The Comptroller stressed that he was not attempting to set a threshold for the appropriate level of carryover, but instead was setting a criteria beyond which there should be a strong justification for carryover. The Comptroller also told us that although the guidance specifically addressed preparation of the fiscal year 1998 budget, he has asked programs to justify carryover balances in excess of 8 weeks starting with the end of fiscal year 1996.

Table 5 compares program carryover balances at the end of fiscal years 1995, 1996, and 1997 to the 8-week criteria. NASA was not able to provide cost plan data for fiscal year 1998. To approximate the 1997 carryover balances in excess of 8 weeks, we used the fiscal year 1997 cost plan. If a program cost plan for 1998 is higher than 1997, the 8-week criteria would also be higher and the carryover in excess of 8 weeks would be lower. On the other hand, a lower cost plan in 1998 would result in a higher balance in excess of 8 weeks. As shown in table 5, significant amounts of carryover funding would have to be justified. In fiscal year 1995, \$1.9 billion would have had to be justified. In

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fiscal years 1996 and 1997, the amounts requiring justification are estimated at \$1.5 billion and \$1.0 billion, respectively.

Table 5: Carryover in Excess of 8 Weeks at the End of Fiscal Years 1995, 1996, and 1997
Dollars in millions

	Carryover in excess of 8 weeks		
	Fiscal year 1995 actual	Fiscal year 1996 estimated	Fiscal year 1997 estimated
Human Space Flight			
Space Station	\$35.7	^a	^a
U.S.-Russian Cooperative Program	99.4	\$18.9	^a
Space Shuttle	^a	^a	^a
Payload Utilization and Operations	62.2	44.8	\$24.6
Total	\$197.4	\$63.6	\$24.6
Science, Aeronautics and Technology			
Space Science	\$477.5	\$558.0	\$316.3
Life and Microgravity Sciences and Applications	252.3	256.5	146.0
Mission to Planet Earth	496.3	434.6	411.7
Aeronautical Research and Technology	78.3	72.2	^a
Space Access and Technology	136.9	57.0	41.0
Academic Programs	117.3	89.0	83.8
Mission Communications Services	52.7	11.2	^a
Total	\$1,743.4^b	\$1,478.5	\$998.7
Total	\$1,940.8	\$1,542.1	\$1,023.3

^aIndicates that a program's carryover balance was less than the 8-week criteria.

^bIncludes \$132.2 million for launch services in fiscal year 1995. After fiscal year 1995, NASA's budget does not include a separate line for launch services.

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AGENCY COMMENTS

We discussed a draft of this report with NASA officials and have incorporated their comments where appropriate.

SCOPE AND METHODOLOGY

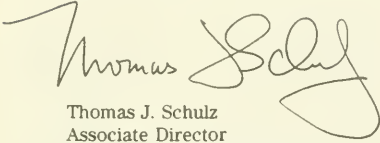
We reviewed carryover balances for programs in the Human Space Flight and Science, Aeronautics and Technology and appropriations as of September 30, 1995 and estimated balances as of September 30, 1996 and 1997. We relied on data from NASA's financial management systems for our analyses and calculations and did not independently verify the accuracy of NASA's data. We reviewed budget and cost plans and discussed carryover balances with NASA's Chief Financial Officer; NASA's Comptroller and his staff; and with financial management staff for the MTPE, Space Science, Space Station, Space Shuttle, and Aeronautics programs. We also reviewed NASA's internal study of carryover balances and discussed the study with the NASA staff responsible for preparing it. We performed our work at NASA headquarters, the Goddard Space Flight Center, the Jet Propulsion Laboratory, the Johnson Space Center, and the Marshall Space Flight Center. We conducted our work between April 1996 and July 1996 in accordance with generally accepted government auditing standards.

As arranged with your office, unless you publicly announce this report's contents earlier, we plan no further distribution of the report until 10 days from its date. We will then send copies to the Administrator of NASA; the Director, Office of Management and Budget, and other congressional committees responsible for NASA authorizations, appropriations, and general oversight. We will also provide copies to others on request.

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Major contributors to this report were Frank Degnan, Vijay Barnabas, James Beard, Richard Eiserman, Monica Kelly, and Thomas Mills. Please contact me at (202) 512-4841 if you or your staff have any questions concerning this report.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Thomas Schulz". The signature is fluid and cursive, with the first name "Thomas" written in a more legible script and the last name "Schulz" in a more stylized, cursive form.

Thomas J. Schulz
Associate Director
Defense Acquisitions Issues

(707170)

Chairman SENSENBRENNER. Thank you very much, Mr. Schulz.

Let me start out by asking a question. It is my understanding that this problem cropped up in the Defense Department and was looked into by GAO and others a few years ago.

And, there was an agreement that was reached that an uncosted carryover, absent extenuating circumstances, should be limited to about three months of the operational budget. Am I correct in that assumption?

Mr. SCHULZ. I don't have the specifics. But, I can tell you what we do with regards to the Department of Defense.

One of my other responsibilities is working with our teams that review the Department of Defense budget requests. And, we do what we call budget scrubs.

In the context of providing to the authorizers and the appropriators in the Defense committees, we start reviewing the budget requests. And, then we look at, for example, how much money did they spend in the prior year, how much money did they obligate in the prior year and how much do they plan for the year.

And, then we bring to the attention of the committees the fact that X amount will be unspent. There might have been a problem with the program so that the particular program will not be able to spend the money.

And, the Congress then, discussing with the Department, makes decisions as to whether or not they want to cut the money, whether or not the Department will want to reprogram the money. There might be other priorities that year.

They have, as you know, and I think NASA does, too, a threshold for reprogramming. For Research and Development, Technology appropriations, the Department of Defense—the Department, for a program, can reprogram \$4 million or 20 percent of the authority for that program each year. For Procurement, they can reprogram without prior notification to Congress \$10 million or 20 percent of the program.

So, our point here is that what we are doing is passing onto the committees for these kinds of discussions—we are encouraging the information, a discussion of what is happening, so you can have that discussion. So, it's not necessarily—it varies—I should say there are certain programs that the Defense committees have pointed out as areas of special interest.

So, for certain programs, the committees, such as yourself, say no matter how much they want to be informed about it. And, that's what we are talking about when I do our Defense work.

Chairman SENSENBRENNER. It seems to me, looking at how much in total months of carryover, according to your report, that there is a difference between the Human Space Flight and the Robotics part of NASA. The Human Space Flight, looking at fiscal year 1996, the Station has 0.4 months carryover; the U.S./Russian Cooperative program, 4.1; the Shuttle, 0.6; Payload Operations, 3.4.

Then, we get to Science, Aeronautics and Technology. Space Science has 5.3; Life and Microgravity, 8.6; Mission to Planet Earth, 6.3; Academic programs, 12.4. And, then the other stuff is either 3 or less.

Have you been able to determine why the uncoded carryovers are so much less for the Human Space Flight components of NASA's budget than for the non-Human Space Flight components?

Mr. SCHULZ. We are in the process of obtaining that information. That's a very obvious question, Mr. Chairman.

We have been asking that question. And, we have received the answers from NASA as to the distinctions.

Part of them has to do with the composition of the programs and the funding mechanisms and contracting mechanisms they use. This is what we are talking about in our testimony that NASA itself has to do some more research and work on what the differences are between the individual programs.

But, we hear such things as the extensive use of grants. For example, in the R&D programs, in the Science, Aeronautics and Technology programs, which tend to have their own problems with regards to closing them out as a cost on the record and tend to be started at any point and time in the year. And, apparently academia doesn't necessarily file the paperwork as quickly as big companies that get involved in developing the hardware for some of the programs in Human Space Flight.

But, there's the Draper report, which we provided to your staff, which is the study requested by the chief financial officer, that has an extensive list of those. And, we need more time to go behind those reasons and explore them.

Chairman SENSENBRENNER. Okay. Now, an uncoded carryover does not count against the deficit, because the check is not cut by the Treasury; and, consequently, there has not been an outlay during the fiscal year involved.

Is this just a paperwork delay for most of these programs or is there actual banking of outlay authority involved so that if Congress should decide to cut the budget then they've got some money set aside for a rainy day?

You know, I would say that if this was a paperwork delay, that's a matter of some concern. But, if it's banking, then people are pulling the wool over the eyes of Congress and the White House and we end up over-appropriating at a time when the American public is demanding that we balance the budget.

Mr. SCHULZ. It could be both. It could be one or the other. This is exactly the specifics we want to chase down.

The issue, I think, as we discussed before, Mr. Chairman, has to do with the extent of oversight that your committees want to have in that context. What is happening—even banking is not necessarily bad if you are aware of it and you agree with it in consonance with a committee decision that, yes, you should bank for future years for a particular program.

I think—

Chairman SENSENBRENNER. Well, that's different. If the White House and the Congress knew about it, that's a conscious decision. If we don't know about it, that's bad.

Mr. SCHULZ. I think that's what we are talking about, Mr. Chairman. It's not necessarily a bad thing, but it's the ability to talk about it between the policy makers up here and the Executive Branch.

Chairman SENSENBRENNER. Thank you very much, Mr. Schulz.

The subcommittee will be in recess for the vote. Mr. Davis has left early and will come back early and resume the question and answer period for Mr. Schulz and the people from the GAO as soon as he gets back.

The subcommittee is in recess, subject to the call of the chair.

[A recess it taken at 10:34 a.m., to reconvene at 10:46 a.m., this same date.]

Mr. DAVIS. We will reconvene the meeting. I have several questions that I know that the Chairman would like to have asked, but I will start posing them.

Since several NASA programs have more funds at their disposal than they plan to spend, what would be the impact next year of cutting their budgets and bringing them into line with the agency's actual spending plans for the next fiscal year?

Mr. DEGNAN. Congressman Davis, there's no clear direct answer to that question because of the factors that are involved that make up that balance. As we've pointed out, there are legitimate reasons for having carryover balances.

It is a question of awareness on the part of the parties involved and what resource pool will be available to an agency in a given year, how much they, in effect, will commit and spend in that year versus how much they will roll out into the following year to take care of costs that occur beyond the budget year. And, essentially, that amount is what we are, in effect, suggesting be part number one of the equation, the discussion, that occurs between those parties; and, number two, it's subject to some understanding as to what is making it up.

As you are probably aware, these balances are constantly changing. Certainly, things that you anticipated doing in a budget year and on which you base an estimate of your carryover into following years don't all come out exactly the way that you anticipated they would.

So, they do roll and change. As we pointed out in the statement, the numbers in our tables, in a sense, represent the initial carryover balances for the years are shown; and, we know, for example, now that we are two-thirds and more through fiscal year 1996 that those numbers are different in many programs.

So, the conversation that takes place can use updated numbers to get a full impact and understanding of the level of program to be carried out in that year.

Mr. DAVIS. So, each program is really different. And, the components that make up that balance could be based on a lot of different items?

Mr. DEGNAN. That's absolutely correct, sir. You have the situations as described by the NASA CFO study. We will be looking further at those.

But, from other work we have done, we have no reason to suspect that those aren't significant factors in causing the differences in the carryovers.

Mr. DAVIS. You haven't found any of these funds to be little piggy banks, have you? Rainy day funds or slush funds or anything?

Mr. DEGNAN. We have not yet had the opportunity to get down to the level of detail in our work that would enable us to start to

differentiate as to what the causes and contributors to the carry-over balances are.

Mr. DAVIS. Sure. I was in county government—

Mr. SCHULZ. It's not an unknown concept, however.

Mr. DAVIS. You know, I was in county government in Fairfax and—

Mr. SCHULZ. Yeah. I live in Burke.

Mr. DAVIS. Okay. We always had those. You always denied them, but you always had somewhere you could turn to for a rainy day or a contingency that you just wanted to keep your balances, because you never know where you may have to shift back and forth.

Mr. SCHULZ. Well, the discussion we had before you came, Mr. Chairman, had to do with, for example, the situation because you might have another priority that all of a sudden you need to—another program that might need some help with whatever. The issue we are trying to point out is, existence of piggy banks or no, a matter of the full participation of the Congress and the Executive Branch in these decisions.

Mr. DAVIS. Exactly.

Mr. SCHULZ. That's what we are talking about.

Mr. DAVIS. Exactly. Well, you try to give your managers some leeway on this, but you also are going—

Mr. SCHULZ. Well, as you say, local government or federal government, it has to be some flexibility in the way the money is funded. Because of the appropriations process, there has to be some flexibility in carryover for government programs.

Mr. DAVIS. Does the county know about you? We could use you in the county, too, on some of their funds.

Mr. SCHULZ. I read the paper, Mr. Chairman.

[Laughter.]

Mr. DAVIS. Okay. Oh, I see the chairman is back. And, I will yield the gavel back, Mr. Chairman.

Chairman SENSENBRENNER. Are you done?

Mr. DAVIS. I will yield you back my time.

Chairman SENSENBRENNER. Okay. The gentleman from Florida, Dr. Weldon.

Mr. WELDON. I thank the gentleman for yielding. And, I apologize for missing your testimony. I will certainly be reviewing it.

I think this is a very important issue, not only as it relates to my particular concern over the issue of NASA and how NASA handles its affairs but as well just basic issues of good government and what constitutes the appropriate use of funds. And, I guess that would lead me into my first question.

Is there an appropriate level of carryover balances for agencies that undertake research and development; and, what does NASA consider an appropriate level? And, I guess a follow up to that is—and you may not be able to answer this. How does NASA compare to some of the other agencies that perform R&D?

Mr. SCHULZ. Good morning, Mr. Weldon. Yes, there are several questions you have asked.

I think in the context of what NASA is doing, NASA has done some studies and has taken some actions to try and get close to answering your question as to what an appropriate level should be for

carryover. As we point out in our statement, they are still working on this.

There are a couple of issues involved with that. Some are unique to each program, in that the nature of the program might require a different carryover balance than another.

In the context, as they describe it, of a program with an extensive amount of grants and an extensive amount of money and not very many purchases of hardware with big contracts, that will vary as to how much money they need to carry over. You will have a situation that probably applies to all NASA programs this year because of the furlough and the government shutdown. They will probably have extensive carryover balances that may be an anomaly for this particular year.

But, they have—and I think the NASA witnesses will fully expand on that, and we pointed out in our report that is attached, they are projecting a three month carryover threshold for NASA programs. Three months basically being three months of the existing year and as it would apply to going into the next year.

The NASA comptroller is also reviewing budget submissions on an eight week threshold. He is requiring eight weeks of—how much money would you need to cover eight weeks for the future year and if you carry that over.

And, that's used, and it's intended to be used, as a basis of discussion within NASA as to what they think should be the appropriate level for that particular program.

Mr. WELDON. Can you—do you have any knowledge of, like, another department like the Department of Defense or the Department of Energy?

Mr. SCHULZ. Yeah. And, with regards to the Department of Energy, there is a situation where basically they have no-year funds. And, the concern of the Congress and the committees involved at that time was whether or not the Department of Energy actually knew how much carryover balance it had.

And, what they have required is not a specific level. What they have required is that with the budget request the Department of Energy identify and report to the committees what their carryover balance is.

So, it's not a specific amount. It's just a requirement to have whatever you have make it known to the committees.

With regards to the Department of Defense, we and GAO have an agreement with the committees, the authorizers and the appropriators, to review all programs of the Department of Defense primarily. In my instance, I look at the major weapons acquisition, for example.

And, we look at—and, what flags us is not any particular amount, but it's an amount in relationship to what they say they intended to spend. And, if it gets to be a high level, it's a flag for GAO to go in and audit and oftentimes report back to the committees what it is—not against a particular threshold, just what it is.

And, for example, the authorizers and the appropriators, you have a choice then to recommend that the money be rescinded, recommend that the future budget request be reduced, recommend that maybe there's another program that the Department should

be looking at and maybe that money should be reprogrammed to that Department. You have lots of options.

So, when it comes to specifics, the only specifics I am aware of in the Department of Defense are those thresholds in which they have to report on to get congressional prior approval. They can reprogram money within certain limits.

For Research and Development, within the Department of Defense, it's \$4 million or 20 percent of the program's yearly authority. With anything under that amount, they can reprogram without getting prior approval. Anything above that amount, they have to inform the committees and the committees then get to decide if they can reprogram it.

Mr. WELDON. Thank you.

Chairman SENSENBRENNER. The gentleman's time has expired. I guess that concludes the questioning, Mr. Schulz.

I want to personally thank you for a very thorough and very incisive report on the problem at NASA. I think that how this has played out, including this hearing today, is the way that congressional oversight ought to be conducted.

There is constructive oversight which results in some changes being made in agencies to make them run better. And, then there's destructive oversight. And, we've seen a lot of examples of that around here over the years.

This is very constructive oversight. And, you have played a very key part in that.

And, I want to thank you. So, I guess this concludes the testimony by GAO.

And, now I will call on Mr. Goldin and his team from NASA. Mr. Goldin, we welcome you here today and we welcome you back from Russia.

I am hopeful that we can have a hearing on what progress has been made on the Russian front some time later on when everything is all sorted out. But, I do welcome you here less than a day off the plane from Moscow to talk about this issue and to give some of your thoughts on what we can do to bring this matter under control in a way that is beneficial both to the taxpayers as well as to the agency.

So, you may proceed as you want.

STATEMENT OF DANIEL S. GOLDIN, ADMINISTRATOR, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Mr. GOLDIN. Mr. Chairman, I would like to submit my formal testimony for the record and make a brief summary.

Chairman SENSENBRENNER. Without objection, it will be included in the record.

Mr. GOLDIN. Mr. Chairman and members of this subcommittee, thank you for the opportunity to appear before you today to discuss the levels of uncoded funding NASA carries over at the end of each fiscal year. This matter was first raised by you, Mr. Chairman, when I testified before you in March.

You particularly referred to the funding requested for Mission to Planet Earth. This is a good example of the subcommittee exercising its oversight role.

We welcome the opportunity to work with GAO to look into this concern.

The oversight of your subcommittee is extremely valuable. It gives me the opportunity to discuss NASA and NASA issues with you.

I hear your concerns. And, I want to explain our actions. And, I also want to say it is clear we must communicate much more intimately with you on the subject and are prepared to do so.

NASA shares your concerns about the increase in levels of uncosted carryovers. In fact, before the GAO began its study, NASA had already formed a team headed by the chief financial officer, Arnold Holz, to look into this issue. Copies of the NASA report have been given to the subcommittee.

The NASA team shared their analysis of the causes with the GAO. It was an opportunity for us to work closely and work well with the GAO on an issue that both sides thought was important.

There are many factors that caused the growth of this uncosted carryover. One example is program management.

I know your concerns about this area were a major factor in having GAO conduct its study. It is critical that science programs or any R&D program have a certain level of carryover.

This is essential, because R&D work is very dynamic.

It is absolutely necessary that we have funds on hand to avoid slipping program schedules when technical changes arise.

There are other factors that affect this issue. The inherent delay in the appropriations and apportionment process make it imperative to have carryover funds. These are needed to insure funding and continuity of programs.

I can assure that NASA is highly motivated to optimize the use of its taxpayer monies so that we deliver the best outcomes we possibly can. We do this in a manner consistent with the legal and regulatory framework in which we operate.

However, there is always room for improvement in NASA's internal management processes. And, with your direction, we intend to carry out the further improvement.

This is especially true in the interrelationships of financial management, procurement management and program management. The need for improvement in our external communications is obvious, and we are committed to doing so.

Mr. Chairman, your concern about this matter and your charge to the GAO to undertake a study of carryover balances have had a positive outcome. NASA is taking the necessary actions which will enable us to do an even better job.

You and members of this subcommittee are familiar with the great changes in NASA's programs, our management approaches and our view of the future NASA funding have undergone in the past four years. You have been a strong supporter of the changes underway within NASA, often complimentary of what we have achieved already but prodding us to do even more.

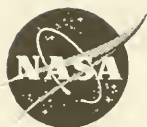
We intend to satisfy those demands. We appreciate the subcommittee's interest in this issue and will be glad to furnish all information the subcommittee desires.

I have told my staff to keep your staff apprised of what NASA is doing. The NASA CFO, Arnold Holz, and comptroller, Malcolm

Peterson, develop and track much of this material and are with me today to assist in answering your questions.

Mr. Chairman, this concludes my statement. I look forward to responding to any questions that you or other members of the subcommittee might have.

[The prepared statement of Mr. Goldin follows:]



National Aeronautics and
Space Administration

Hold for Release Until
Presented by Witness

July 18, 1996

Subcommittee on Space and Aeronautics

Committee on Science

House of Representatives

Statement by:
Daniel S. Goldin
Administrator

104th Congress

Statement of
Daniel S. Goldin
Administrator
National Aeronautics and Space Administration
before the
Subcommittee on Space and Aeronautics
Committee on Science
House of Representatives

Mr. Chairman and Members of the Subcommittee:

Mr. Chairman, thank you very much for providing this opportunity to testify today on our analysis of the unobligated funds and uncosted obligations carried over at the end of the fiscal year and their relationship to NASA's FY 1997 budget request. You raised this matter, Mr. Chairman, when I testified before this Committee on March 28, 1996, particularly with respect to the funding requested for the Mission to Planet Earth program. We welcomed the Committee's interest in this subject and the opportunity to work with the General Accounting Office (GAO) staff. The subsequent GAO study on the carryover balances for this and other NASA programs complemented NASA's internal reviews of the broader issue of unpaid or unliquidated balances of appropriations made to NASA. In fact, the NASA study, chartered by the Chief Financial Officer, Mr. Arnold Holz, was completed and issued in early June. The Committee has received copies of NASA's report, which includes extensive analyses as well as definitions of budget terms. I would like to submit a copy of NASA's study for the record. As a result of the GAO and NASA studies, we have defined a number of steps to improve our financial management practices and thereby ensure the greatest payback to the taxpayers for their investment in NASA's programs. The NASA CFO and the NASA Comptroller, Mr. Malcolm Peterson, who are with me today, will assist me in answering your questions.

Let me begin with some overarching observations about how NASA's research and development program budgets are constructed. First, let me discuss how development programs are managed, using the example of a cost-reimbursement contract: NASA's program managers operate within a process which calls for constant reviews of the technical, schedule, and financial status of development programs. We work closely with our contractors in that process because almost all development programs are carried out in the framework of contracts specific to the development task. Contract funding needs are met by the obligation of budget authority, work is performed, and the amount of work performed for which the contractor may seek payment is recorded by the accrual of costs. The contractor then bills NASA--the Government--and NASA certifies the appropriateness of the billing so that the U.S. Treasury may disburse the funds. At the end of each fiscal year, the difference between NASA's cumulative, usually multi-year, funding plan for the program, the budget authority, and the amounts actually obligated represent the unobligated balance carried over into the next fiscal year. The difference between the amount of obligations placed on contract and the accrued cost recorded to reflect work performed is the amount of uncosted obligations carried over. Combined, these sums are referred to as the "uncosted carryover."

Let me use the example of the Earth Observing System (EOS) development program within the overall Mission to Planet Earth enterprise. NASA initiated the EOS program a number of years ago with a plan to spend over \$17 billion through FY 2000. In conjunction with Congress, the Administration, and many scientific advisory groups, we have now refocused the program on twenty-four (24) key measurement areas, and reduced the spending plan through FY 2000 to less than \$7 billion. The process of rescoping the EOS program has been almost an annual event, and while that has introduced substantial instability in the program funding plans over the last five years, the effort has paid off. The attached chart (Attachment 1) depicts the change in funding plans for EOS over time. The instability has led to a loss of accuracy in the last three years' budget estimates of the end of year uncosted carryover estimates. The estimates have been constantly revised to reflect a number of factors: changes in the contractually authorized scope to accommodate internally and externally mandated changes; delays in initiating new contracts as program plans have been altered; and, other factors such as the impact of continuing resolutions on contract funding actions and delays induced by protests of contractor selections. Additional uncosted carryover funding resulted from delays experienced during FY 1994 and FY 1995, thereby enabling the Committees on Appropriations to reduce NASA's FY 1996 funding request for EOS by \$75 million in Conference action on H.R. 2099. In our FY 1996 Operating Plan submitted to Congress, NASA was able to reduce EOS by an additional \$29.4 million because of an "underrun in planned program obligation and cost incurrence rates for FY 1995 and the first six months of FY 1996." I believe this is an excellent example of how the Congress and NASA work together to adjust budgets and reallocate funds to ensure a good balance between program technical, schedule, and procurement status and the resultant funding plan.

Another example is from a Space Science program, the Cassini mission to Saturn. Cassini is an ambitious, complex international development, scheduled for launch in late 1997. In the case of Cassini, the program baseline has been reasonably constant over the past several years, but the program's uncosted carryover has increased. Cassini represents a success story in progress, because its managers have been able to solve a number of development problems without consuming the development reserves included in NASA's annual funding requests. For example, the program management is currently predicting that the end of FY 1995 uncosted carryover of \$87 million will not decline as anticipated, but actually increase by the end of this September to \$96 million. This is the direct result of having not spent \$22 million in program reserves, an excellent performance. So, why shouldn't NASA adjust the \$107.8 million requested for Cassini in FY 1997's budget to a lower number? Development programs, especially those with planetary launch windows, occasionally encounter problems in final integration and test prior to launch. Nevertheless, the Committee can rest assured that NASA will certainly adjust funding requirements downward for Cassini through the Operating Plan process if and when Dr. Wesley T. Huntress, Jr., NASA's Associate Administrator for Space Science, believes it is safe to do so.

NASA follows quite closely the cost performance of the many cost-reimbursable development contracts funded within EOS, Cassini, and other research and technology development programs. Each contractor's funding requirement is analyzed during the fiscal year, using as a basis the reports furnished us by the contractor each month. Every month's report includes the contractor's estimate of the amount of uncosted contract obligations required to meet liabilities for outside purchase orders and subcontracts. At fiscal year end, the contractor's uncosted carryover for "unfilled orders outstanding" represents the minimum carryover required. The Government may also obligate additional funds on the contract to provide for continuing operations during the initial weeks of the new fiscal year. This provides the contractor with assurance of continuing contract

operations during this period when a Government funding discontinuity can occur. So, some amount of uncosted carryover at fiscal year end will be found on each active NASA cost-reimbursement contract, with the amount for each contract varying depending upon known liabilities for unfilled orders and the amount of forward funding. At the NASA program and project level, the total uncosted carryover is made up of these individual contract carryover amounts, the program management reserves and other unallocated provisions for internal small purchase orders or institutional support.

The uncosted carryovers in the Space Science, Mission to Planet Earth, Life and Microgravity Sciences, Education, and Minority University Programs are also greatly influenced by another factor. These NASA programs fund a great many small research contracts, grants to academic institutions, cooperative agreements and the like, where funding levels are fixed at the outset. These contracts and grants are awarded throughout the fiscal year. For example, there are some 1600 active grants just in the Space Science program. The uncosted carryover amounts at fiscal year end represent the difference between the obligation incurred and the amount recorded as costed. For small fixed price contracts, NASA customarily uses a cost allocation algorithm to record the costs because monthly cost reporting is not required from the contractor, a procedure instituted to avoid an unproductive reporting burden on the small contractor. The timing of issuing such small contracts and grants and, thus, the uncosted carryover amounts at year end, is considerably influenced by the availability of budget authority, such as during continuing resolutions, and a myriad of other factors, among which are the relative priority of the work and the workload in the procurement system.

The Committee's interest in the general subject of uncosted carryover within NASA has stimulated a more detailed review of the uncosted balances in these small contracts, grants, and cooperative agreements. A large number of the grants have been funded directly from Headquarters. The preliminary results indicate that the process within NASA Headquarters for recording cost accruals on grants is labor-intensive, has historically been assigned a low priority in terms of workload, and that the cost accruals for grants are understated. Thus, the end of FY 1995 accrued cost figures for the "research and analysis" accounts in NASA's three Science Programs and Academic Programs are lower than should have been the case. (However, neither the accuracy of the obligation or disbursement numbers is in question; the problem affected only the intermediate step of recording cost accruals.) The backlog has been identified as a management concern, and is being remedied by NASA temporarily hiring personnel from the Financial Management Service, Department of the Treasury. Good progress has been made on working off the backlog, and NASA anticipates our FY 1996 year end results will reflect fully up-to-date cost accruals. In the future, the administrative processing of grants, including accounting operations, will be transferred to field installations more capable of handling the workload.

We have also gained additional insights into areas needing improvement from the study undertaken by Mr. Holz, our Chief Financial Officer, on the increases in the amount of "unliquidated" funds reflected in our published financial statements. The consolidated financial statements for the Agency provide a detailed accounting of NASA's fund balances, and have been audited by the NASA Inspector General.

As noted earlier, NASA's CFO-chartered study team issued its report in early June. The team identified a number of contributing factors to the growing balance of unliquidated budget authority, including:

- slow release and distribution of funds from Headquarters;
- funds held by program and project managers for program reserves;
- the current method of budgeting for many science and technology programs focuses on forward funding of contracts, not on the cost incurred to accomplish the planned technical work; the increasing number of contract and grant awards and slow closeout of old award instruments; reporting delays from grant recipients on use of funds; forward funding required on procurement award instruments; slow invoicing from other Government agencies; and,
- normal lag time for cost and disbursements.

The team identified areas in which NASA can implement improvements and made several recommendations for reducing a large percentage of the unliquidated obligations balance. A detailed schedule has been established with specific assignments to address all the recommendations of the team. Let me assure you, I have assigned this as a high priority job for the NASA CFO and the procurement, program and financial management team throughout NASA.

Some of the contributing factors identified by the team appear to have roots in the problems of getting annual budgets agreed to by the Administration and the Congress. Continuing resolutions and lack of established Operating Plans at the beginning of the new fiscal year take their toll. The team also attributed delays in obligating and costing funds to the changes in not only what NASA is doing, but how we are doing business. The desire to balance the Federal budget on the part of both the Administration and Congress has resulted in dramatic changes in the NASA budget runout plans since I became Administrator in 1992. The budget changes are summarized on the attached budget summary chart (Attachment 2). I agree that the overall uncertainty of the times for NASA's programs and our managers has clearly had its delaying effects. As Administrator, I must be responsive to the budget guidance coming from the President and the Congress. NASA's task is to do the best we can with the funds provided.

I take full responsibility for any delays in obligating and costing funds that have been caused by the restructuring of our major programs. These delays occurred because changes in program content, procurement and Government management approaches needed to be made. The Chairman and the Members of the Committee know that I have, on occasion, quarreled with the advisability of certain budget cuts. Yet, on balance, I and the entire NASA management team fully embrace the premise that the budget outlook for NASA has been profoundly altered and that we needed to change with it. I am proud that the NASA team has quickly responded to changes in program planning by adjusting the near-term obligation and cost performance and underrunning their program obligation and cost plans. In 1993, the Advanced X-ray Astrophysics Facility (AXAF) was rescope from a program life cycle cost of \$5.8 billion; now, it is \$2.1 billion. Cassini was \$3.6 billion; now it is \$2.7 billion. There have been major changes in our program plans, but we fully intend to launch on time and with a wonderful potential for expanding our scientific knowledge. You might recall the GAO report of some years ago cataloging a median cost growth of 77% on NASA development programs. We have turned that around! Now, the Committee will no longer find the previous NASA attitude of tolerance toward program overruns resulting from buy-ins, poor contract management or poor control over program content and schedules. No one can question the extent of change within NASA, whether resulting from redirection and renegotiation of ongoing contracts, or delays in the award of new contracts to ensure their compliance with our new procurement principles for development contracts, or deferrals of contract work until the fundamental program changes could be agreed to by the science community and confirmed through the annual budget process, or insistence upon the peer review process for

selecting science grants. All these changes, compressed into the last few years, have had a downside. Some loss in the accuracy of NASA's program obligation, cost, and outlay forecasts has resulted in the areas most affected.

Following are a few specific examples of how change affects our forecasting abilities. Inside the Agency, NASA's managers have deferred the placement of purchase requests for relatively small dollar procurements, including buying new computing hardware and software, thus deferring obligations and costs. In most cases, that is exactly what we want our managers to do, because we do not want them buying products where we are changing to an Agency-wide standard. Where we had nine Centers and Headquarters each having different computer systems and a lack of standards, now we will save substantial dollars by having standards, sharing of supercomputers, and fewer communication networks. On major programs like Life and Microgravity Sciences or Mission to Planet Earth, NASA has made many changes to accommodate budget downsizing while improving the quality of the science produced. We have deliberately induced delays in awarding contracts, or changed the basic elements of existing contracts. All of these have led to increases in the amount of unobligated and obligated but uncosted funds. Sometimes, the delays were not due to the necessary changes in program approach, but simply having to wait for a procurement protest to be resolved.

The beneficial side of these changes is that they have enabled NASA to absorb budget reductions in those programs without materially affecting the value the public will receive from such investments. I have already noted that the appropriations reduction by Congress in FY 1996 in the Mission to Planet Earth program was specifically agreed to by NASA because of the large balance of uncosted carryover. Similar appropriations reductions have been made over the past several years in the Life and Microgravity Sciences program as a consequence of delays in awarding Space Station science facility contracts or cost reductions undertaken in the Spacelab program.

Another action has been taken which will influence the formulation of the FY 1998 budget and the FY 1997 Operating Plan. This process, now underway, features a close examination of uncosted carryover balances estimated for the end of FY 1996 and subsequent years. The NASA Comptroller has issued a budget formulation guidance document requiring NASA program managers to justify uncosted carryover amounts in excess of eight (8) weeks of operations into the next fiscal year. We intend to refine this initial, broad metric of 8 weeks of carryover into more detailed metrics in the future, but for now the information obtained will be used to examine the level of carryover required for differing types of programs and procurement approaches. Tailored metrics will be put into place in NASA to accommodate the differences in carryovers required for construction programs, or research programs having a lot of grants, or programs using fixed price contracting approaches.

As you know, we have worked closely with the Committees on Appropriations on the relationship of uncosted carryovers to our budget estimates. For programs such as the Space Shuttle and Mission to Planet Earth where the relationship changes from the time when NASA prepares its budget, our ability to take into account unanticipated increases in current fiscal year carryover amounts enables NASA to accept funding reductions in specific areas without materially impacting program content and schedules. Clearly, it is in NASA's best interests to ensure budget reductions are accommodated with the least possible adverse impact on the implementation of NASA's Strategic Enterprises and individual program performance. A key element of this analysis is the amount of unobligated funds in the total uncosted carryover. Annually, NASA reports to this Committee the status, by major program, of unobligated funds from prior appropriations.

However, the discussion of uncosted carryovers with Committee staff has generally been specifically addressed only in program briefings for the Space Shuttle and the Space Station. Clearly, the concern you raised at the March 28th hearing regarding the Mission to Planet Earth program's uncosted carryover points out our need to expand the discussions into other program areas. We are committed to improve our communications with you on the both the Agency-wide and specific program status of funds.

In my testimony today and in the responses to your questions, I hope some light will have been shed on the need for certain levels of unobligated and uncosted obligations to manage our research and development programs and contracts in a legally compliant, efficient and prudent manner. I can assure that you NASA is highly incentivized to optimize the application of the taxpayers' monies to ensure we deliver the best outcomes we possibly can, consistent with the legal and regulatory framework in which we operate. Nonetheless, there is always room for improvement in NASA's internal management processes, especially in the interrelationships of financial management, procurement management and program management. The need for improvement in our external communications is obvious, and we are committed to doing so.

Mr. Chairman, your concern about this matter and your charge to the GAO to undertake a study of carryover balances have had a positive outcome. NASA is taking the necessary actions which will enable us to do an even better job. You and the Members of this Committee are familiar with the manner in which the past four years have been a time of great change for NASA's programs, our management approaches, and our views of the future prospects for funding NASA's institutional base and its major programs. You have been a strong supporter of the changes underway within NASA, often complimentary of what we have achieved already but prodding us always to do even more. The NASA team appreciates the oversight of the Committee. Mr. Chairman, this concludes my statement. I look forward to responding to any questions which you or other Members of the Committee might have.

Background

The process of program, contract, and financial management in the Federal Government is ruled by laws, regulations, and processes. Most of the crucial ones stem from the provisions of the Anti-Deficiency Act. The key premise of this law is that Government agencies will not act in such a manner as to compel Congress to pass a supplemental appropriation -- except as provided for in law or in times of emergency -- to cover current obligations and liabilities. That simple tenet governs much of Federal government financial business.

Complementing that for NASA are: (1) the "Operating Plan" process under which NASA notifies its appropriations and authorizing Committees as to the Agency's plan for enacted appropriations and changes desired in the distribution of those funds; and, (2) provisions of annual authorization acts which enable the NASA Administrator to seek the concurrence of the Committee in material changes in NASA's program plans. Both the Operating Plan process and the reprogramming authorities included in annual authorization acts enable NASA, in dialogue with the cognizant Committees, to adjust the content and funding plans for R&D programs. This process recognizes that risks, uncertainties, and new opportunities are part of the operating environment of NASA's programs. NASA managers understand the importance of this consultative process as a crucial element of managing in an Government R&D environment.

Agency managers have a number of responsibilities to ensure compliance with the statutory requirements and other imperatives of the process:

- The phased release of the appropriated and apportioned funds -- the budget authority enabling the incurrence of obligations -- to the procurement process over a reasonable period of time to ensure contract obligations are not entered into at a rate which would force the Congress to concur in NASA's reprogramming of funds or to pass a supplemental appropriations bill. During short-term continuing resolutions, the presence of unobligated and uncosted funds enables NASA to keep our contractors operating without disruptions.
- Close monitoring of the rate at which costs are incurred on cost-reimbursement contracts to ensure sufficient balances of uncosted obligations exist to allow continuing contract operations.
- Establishment and retention of appropriate program-level reserves or taking other measures to offset foreseeable needs for additional contract funds, such as occur through technical changes as hardware is being built.
- Close attention to the accuracy of obligation and cost plans for individual programs and measures of contractor performance against those plans.
- Consulting with NASA's authorizing and appropriating Committees prior to material changes in program plans and associated funding requirements, as for example might result from changes in scope due to technical problems or from deviations from our anticipation as to contractor performance.

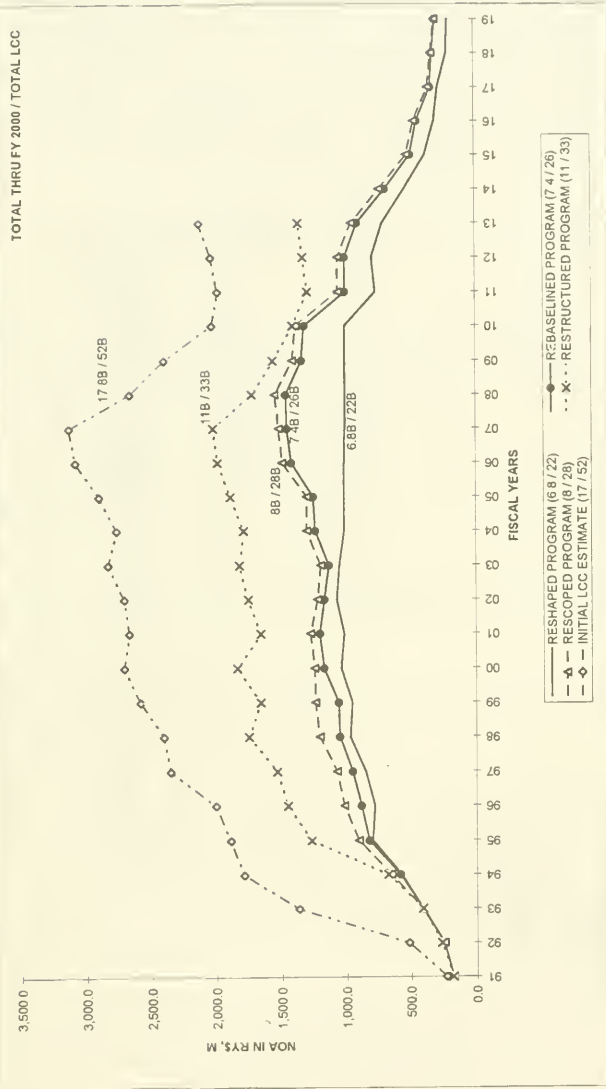
NASA manages a wide variety of programs and activities, all of which require differing styles of program management, contracting and financial management.

- Making research grants to university investigators requires a rigorous “peer review” selection process; the funds obligated on these grants are fixed at the outset for the period specified, costed through notifications furnished by the academic institution, and then paid out (or “liquidated”) as expenses are properly incurred by the university drawing down on a letter of credit deposit account. The timing of the selection process during the fiscal year and the resultant grant awards and obligation of funds are major determinants as to the amount of funds at fiscal year end that are unobligated, uncosted obligations, and costed but unpaid obligations.
- Research and development contracts awarded to companies are often cost reimbursement in form, and these contracts have additional funds obligated on them only when it is in the best interests of the government. Vouchers for payment are submitted only after the work has been performed, the costs accrued, and legitimate expenses incurred by the company. The government then reviews the voucher, certifies its acceptability, and asks the Treasury to make payment. At fiscal year end, the differences between the funds obligated on contract and the costs accrued represent: (a) the timing difference between the value of work authorized and the value recognized for the amount of work accomplished; (b) orders placed with vendors and suppliers but where delivery (and cost recognition) has not occurred; (c) coverage of other liabilities, for example as would be incurred in the event of termination; and, (d) forward funding of the contractor’s future operations. The amounts uncosted and unliquidated amounts vary substantially among programs. Programs in their start-up phases typically have not awarded many of the planned contracts or are in the build-up phase of the cost profile; these have significantly larger amounts of unobligated funds and uncosted obligations than do on-going programs having established contracts.
- The obligations, costs, and expenditures for civil service personnel salaries and benefits accrue as the work is performed. At year end, only a relatively small amount of the funds are undisbursed, just the amount required to cover the work performed through September 30th, but for which checks have not been issued.

Construction, procurement and supply purchase contracts are customarily firm fixed price arrangements, where the cost and disbursement recognition of the full amount of the obligation made at contract outset will vary depending on the length of time it takes for the work to be performed. Once again, cost recognition and payment usually requires some explicit milestone to have been achieved. On small contracts with short duration, usually the cost is accrued and payment made only after the goods are received. On large construction contracts, the obligations are made to allow for recognition of the liability which will be incurred up to a certain milestone, and the payments are made on the basis of milestones actually achieved. The unliquidated amounts at fiscal year end will also vary substantially, often as a matter of budgetary policy as to the need for appropriations being made to cover the full liability. Generally speaking, the unobligated budget authority, uncosted obligations, and unpaid are much larger in this area.

OFFICE OF MISSION TO PLANET EARTH

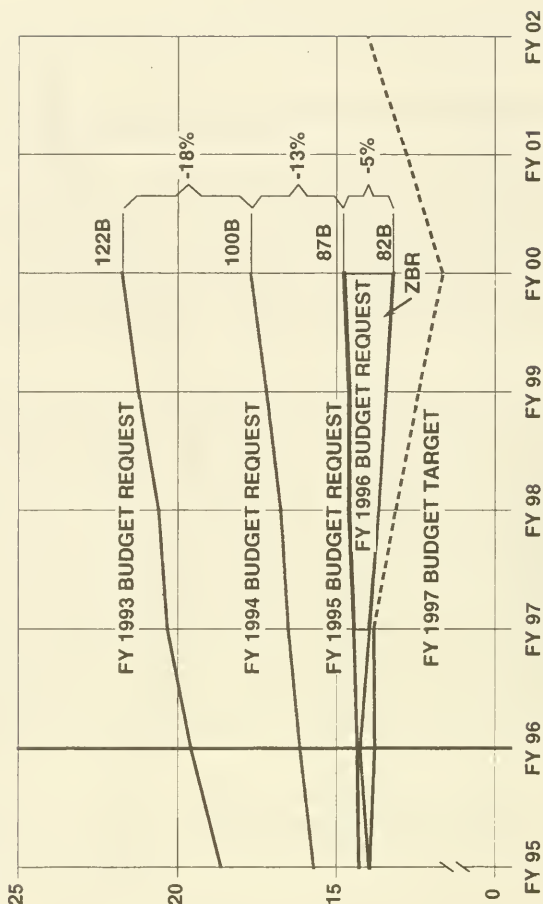
EOS FUNDING HISTORY (NOA, RY \$ IN MILLIONS)





FY 1997 PRESIDENT'S BUDGET

REAL YEAR DOLLARS
(BILLIONS)



Chairman SENSENBRENNER. Thank you very much, Mr. Goldin. And, all of your written material will be included in the record.

Can you explain why the uncosted carryovers for the non-manned space flight programs are so much higher than the uncosted carryovers for the manned space flight programs?

Mr. GOLDIN. Yes. First, they are very different in character. The Human Space Flight program is dominated by a few very large programs in the Shuttle and the Station. Especially the Shuttle, it's more operational and routine. And, the programs extend over a decade or more.

If you take a look at the Shuttle work force, it's relatively constant on a month-to-month basis. And, the funding requirements are more easily forecast.

In the case of the Human Space Flight account, they have 500 active contracts with only 100 grants. In the Science, Applications and Technology programs, we have many more programs.

In fact, we have 7,000 contracts, cooperative agreements and grants. And, of that, we have 4,000 grants as compared to 100.

And, many of these contracts are small Basic and Applied Research contracts. And, these contracts and grants work with small teams of people and don't have the continuity of funding.

And, they will staff up and staff down. And, people will come and go.

And, we have to be very sensitive not only to the grants but the small businesses. They have a very difficult time dealing with NASA, and they need more of a continuity and commitment to funding up front.

So, to the first order—and, then the other activities in the Science, Application and Technology, they are much more developmental in nature and they have much more risk and there are different levels of reserves that are carried.

In addition to which the Space Station program, as you know, is level funded. It's level funded at \$2.1 billion a year.

And, many of the programs in Science Applications and Technologies have the typical bell-shaped curve where they will be peak funded and then come back down. And, in many cases, to get activities started, we need to make commitments up front for long lead activities. And, we have to carry larger reserves up front for these programs.

So, those are the major differences that I see in my mind. However, I must say that when our consciences have been raised, we believe that there is a lot of work that we can do.

We are in the process of understanding it better. And, with the leadership of Mr. Peterson and Mr. Holz, we are trying to establish metrics that will allow us to communicate with you where we will be justifying any uncosted carryover over eight weeks. So, that will help us communicate with you on the subject.

Chairman SENSENBRENNER. And, now I've noticed, using Table 2 of the GAO report, that, for example, Space Science, the uncosted carryover goes down a little bit more than \$240 million from the end of fiscal 1996 to the end of fiscal 1997. But, with Mission to Planet Earth, the uncosted carryover goes down a little bit less than \$23 million.

So, the uncosted carryover in Space Science is ramping down, but the uncosted carryover from Mission to Planet Earth is staying the same. Why is that?

Mr. GOLDIN. Could I ask Mr. Peterson to answer, please?

Chairman SENSENBRENNER. Yes.

Mr. PETERSON. Mr. Chairman, the Space Science numbers are dominated by the fact that both AXAF and Cassini are phasing down in terms of their development profile. They are getting ready to launch.

And, so the uncosted carryovers, which are quite large for AXAF and Cassini, predicting going out this year, for instance, Cassini will probably carry out somewhere close to \$100 million of uncosted. A lot of that will be contingencies that have not been spent.

As we go out of fiscal 1996 and we've finished the pre-launch preparations for Cassini, we will either, of course, spend that money on whatever contingencies develop or we will ask for the operating plan process to reprogram the funds to other meritorious areas with your, of course, notification and concurrence.

Chairman SENSENBRENNER. And, how come it hasn't gone down significantly for Mission to Planet Earth?

Mr. PETERSON. Well, the point with Mission to Planet Earth is we are actually on the other side of the curve. We are in the build up of all these flight programs.

With the exception of the EOS First Morning Platform, AM-1, and LANDSAT, almost all of their flight programs are planned to occur somewhere in the late 1990s, early 2000s. And, so we are on the up-slope of the bell curve.

And, the reserves, therefore, and the carryovers are consistent with the fact that the contracts are going at a higher rate of activity.

Chairman SENSENBRENNER. Thank you. The gentleman from Texas, Mr. Hall.

Mr. HALL. Very quickly, Mr. Goldin. On the basis of GAO's testimony, I think it could be argued that your current budget request could safely be cut by the amount of the carryover balance. I don't believe you like that idea, but I will ask you what do you think of it and what would be the impact of such a cut to NASA's budget that has been suggested?

Mr. GOLDIN. Well, let me say this, that we have a plan. We understand where we are going. Our uncosted obligations have risen in the last few years. A large reason for that is we have been making very significant cuts in our five year budget plan.

One of the things that we have done—and maybe we overemphasized this—we told our people, “Don't commit money when we are in the middle of a replanning exercise, because if you commit money to an old plan and then go to the new plan, you don't have the uncosted to deal with. You will have spent money inappropriately.”

We see—and the GAO pointed out in their report—that as we go from fiscal 1995 to fiscal 1996 to fiscal 1997, we are anticipating a significant reduction in the uncosted.

Mr. HALL. Isn't it a fact that most of this money, even though it's a carryover, is committed?

Mr. GOLDIN. It is committed, but we have not yet obligated it. And, let me give you an example of a circumstance.

Mr. HALL. Okay. But, because I don't know nearly as much as you do about it, let me ask you questions as I go.

Would it be logical for someone, say, they are a bureaucrat rather than being an administrator, that they would hasten to spend and obligate that if we would try to make that part of your next year's budget? It would be some that would do that, wouldn't there?

Mr. GOLDIN. I would hope that people wouldn't think that way, but—

Mr. HALL. Well, we've seen it time and time again. I've seen it in my own family.

[Laughter.]

Mr. HALL. You know, I lost my credit card one time, my wife's credit card. And, they found it over in Phoenix six months later and they asked me what I wanted to do about it. I said, "Let him keep it. He's not spending near as much as she was."

[Laughter.]

Mr. HALL. But, I guess the GAO—I guess the question to both of you is whether or not the amount of money available to the agency over a five year period is still limited by the sum of the annual appropriations; it's a good statement, isn't it?

Mr. GOLDIN. Absolutely. And, let me say this. I'm very proud of the NASA team, by the restraint they showed, because in other circumstances in other places, when you go through replanning, those that are committed to the old way of doing business have a tendency to go get that money committed so you can change it. So, in a certain sense, we erred in the direction of not committing taxpayers' money while we were going through a replanning, which did give us a bit of a bulge.

But, now that the replanning is done, we know where we are going to spend the money. And, I think that is the important point.

However, I come back to the issue that Mr. Sensenbrenner brought up. Has NASA really worked the measurement and the communication of this issue so that the authorization committee knows what we are doing? And, to that extent, I would say that we have not communicated to the authorization committee the details of what we were doing.

And, that's the place I think we need to fix.

Mr. HALL. I think a strong chairman like Mr. Sensenbrenner would see some red flags if he saw unexplained carryovers. And, I guess that's what he was seeking to do to get that explanation. I'm certainly satisfied with it. Thank you.

Chairman SENSENBRENNER. The time of the gentleman has expired.

The gentleman from Pennsylvania, Mr. Walker.

Mr. WALKER. Thank you, Mr. Chairman. Let me go, if I could, to Table 3 that's in the GAO report, indicating the number of months of carryover that is involved.

If the goal here is to have about three months of carryover funds, then there are some anomalies that show up on this particular chart. For example, Academic Programs shows up almost a year of carryover funds.

Can you give me some idea as to why that particular one shows up as a very distinct anomaly?

Mr. GOLDIN. Yes. And, in fact, I have to say that when we went through this exercise, this was one of the big surprises for me. And, I felt very uncomfortable with it.

But, I took a look at the academic world. And, here's how it goes.

The school year begins just as our fiscal year is ending. And, the schools need a commitment up front before they take action.

So, the process kicks off where we will appropriate money, put it into the budget. And, they run a peer review process to select the people to do the job.

And, it's a very thorough process that we, the government, have asked them to undertake. But, they cannot commit to go get people to participate in the peer review process until we commit the money.

So, in effect, we commit the money at the beginning of one fiscal year. And, then it starts getting expended at the end of that year and the beginning of the next one.

Mr. WALKER. So, in essence, you are forward-funding and then awaiting peer review to actually allocate the monies?

Mr. GOLDIN. Yes.

Mr. WALKER. And, so you get kind of a full year of lag until you can—until you actually put the money into a program after it has been peer reviewed; is that—

Mr. GOLDIN. That is my understanding. Now, the NASA comptroller is disagreeing with me. And—

Mr. WALKER. Okay. Well—

Mr. PETERSON. I'm sorry, just a nuance. The process begins, of course, and as Mr. Goldin said, in our fiscal year—let's take fiscal 1996, for instance. We started the peer review selection process, the proposal, solicitation and going through and then selecting. And, that process goes on through this year.

And, in many cases, then, the work is not actually turned on at the university until the following fiscal year. And, that's the kind of lead time that we are getting at.

Now, we select—but the university is basically giving themselves somewhere around a six month lead time before—after they get notification they have been selected before the work is turned on. And, that allows them to maintain continuity in their staffing and know that they can meet their payroll.

Mr. GOLDIN. But, Mr. Walker, there is one issue that came out of this study in working with the GAO. And, that is we are not—we, NASA, were not doing a good enough job in keeping track of the cost accruals.

And, it was a large number of very small contracts. So, we have sought help to reduce that backlog.

And, I think this will fix it. Again, it comes out of the issue that Mr. Sensenbrenner brought up.

Mr. WALKER. The other areas on this chart where you have almost twice as long as what you would have as an optimum are in Life and Microgravity Sciences and Applications and Mission to Planet Earth. Does the same explanation that you gave to Chairman Sensenbrenner with regard to the amounts of money apply to

the—to this explanation of why you have that number of months of reserve as well?

Mr. GOLDIN. Mal, do you—

Mr. PETERSON. Yes. Let me just go through the thing. The three science codes do, indeed, of course, have a substantial amount of research and analysis grants activity. And, their uncoded carryovers for those activities tend to be hundreds of millions of dollars. So, that component of it is very much along the lines we just discussed.

In Mission to Planet Earth and in Space Science, prior to fiscal 1997, what we were looking at is a large amount of that money coming in the development programs, EOS and, of course, Cassini and AXAF and others in Space Science. Now, part of that has to do with the fact, particularly in the most recent years, that we had significant delays in kicking off contracts for an EOS.

For instance, if you remember, on EOS, we started the contractor and then immediately put them into a fairly extensive hold pattern until we got the design straight. And, we had a lot of external reviews to help us.

So that the spending plan that they originally came in with was greatly stretched out. And, what we did, of course, was carried over those funds.

Mr. WALKER. And, you are holding the original money that was allocated to those programs, then, in reserve; is that—

Mr. PETERSON. Yeah. It gets held in reserve until it is appropriate to spend it.

Mr. WALKER. Thank you, Mr. Chairman.

Chairman SENSENBRENNER. The gentleman's time has expired.

The gentleman from Alabama, Mr. Cramer.

Mr. HALL. Mr. Chairman, could I ask unanimous consent to put the opening statement of George Brown in the record.

Chairman SENSENBRENNER. Without objection.

Mr. HALL. Thank you.

[The opening statement of Mr. Brown follows:]

OPENING STATEMENT

BY

HON. GEORGE E. BROWN, JR.

Good morning. Since I am interested in hearing the testimony of our witnesses, I will limit my opening remarks.

I believe that today's hearing can be useful in helping us to better understand both the strengths and limitations of the financial data used to measure NASA's performance in carrying out its missions. Based on my review of the witnesses' written testimony, it appears that interpretation of the implications of differing levels of carryover balances is not a simple task. In addition, it does not appear that there is yet a consensus on what levels of carryover balances are appropriate in all cases. I hope that today's hearing will help us sort through some of the issues associated with carryover balances.

However, I do find at least two elements of the written testimony that should be noted. First, it is clear to me from GAO's written report that, contrary to some earlier assertions, GAO has *not* found any evidence that NASA is maintaining some secret "slush fund" in Mission to Planet Earth. I had no doubt that would be the result, but I think the record needs to be clear in that regard.

Second, as Administrator Goldin's testimony describes in compelling detail, Congress's inability to carry out its legislative tasks in a timely manner exacts a serious toll on NASA's ability to efficiently carry out its programs. When we exam-

ine whether or not the taxpayers are getting their moneys' worth from NASA, we cannot ignore the role that we play in determining the outcome.

Thank you.

Mr. CRAMER. Thank you, Mr. Chairman. And, with this panel, I want to tell you, I obviously came in late and I hope I am not asking questions that have already been asked.

But, Mr. Goldin, according to what I see, it seems that your carryover balances are larger for NASA's Science programs than for other programs within the agency. Would you comment about that? Why do you think that is?

Mr. GOLDIN. Well, as the issue relates to the fact that the Human Space Flight account is more operational in nature and more routine funded. That is, the Shuttle has been operating for more than a decade, and the month-to-month variation in activity is very well understood and very stable. So, you could make a very good assessment and don't have to carry the level of reserves you would carry for a new development program.

Also, the Space Station is level funded at \$2.1 billion a year with a known set of tasks. We have been marching along with those sets of tasks as we go.

There are an order of magnitude less contracts in the Human Space Flight account than there are in the Science accounts, because we have a larger number of small businesses and a huge number of university grants where they need the stability and the up front commitment that we have just been talking about.

So, those are the major determining factors.

Mr. CRAMER. Well, then, to what extent can we conclude that maybe carryover balances are facts of life within those activity accounts?

Mr. GOLDIN. Carryover balances are necessary. And, the issue that we are facing up to here is what is the appropriate level.

And, based upon the interest of this committee, the NASA comptroller and CFO have tried to develop a set of metrics that over the time ahead will allow us to make better measurements and understand this and measure this in a much more visible manner to the committee. And, then together we could work through each year so we will have an understanding of the uncoded carryover with some real good reference points. So, we are trying to understand it better.

Mr. CRAMER. With NASA's budget and the pressure that has been on you in the last few years to consolidate and review and redesign, you've done a very good job with that.

What impact do late appropriations, furloughs and continuing resolutions have on your ability to conduct your programs and minimize your carryover balance?

Mr. GOLDIN. Well, it is crucial that we carry an uncoded carryover to cover those circumstances, because if we could not cover those circumstances we would have a very significant discontinuity in the program that would lead to a very large additional cost to the taxpayers. And, that does factor into our uncoded carryover.

Mr. CRAMER. Thank you. Thank you, Mr. Chairman. I have nothing further.

Chairman SENSENBRENNER. The gentleman's time has expired. The gentleman from Virginia, Mr. Davis.

Mr. DAVIS. Thank you. Let me just pick up where Mr. Cramer kind of ended, because I do think that looking at your testimony does suggest that a cause of this financial surplus or mismanagement or—a lot of this is caused by the instability in the programs themselves and what is coming out of Capitol Hill in terms of the mixed signals we give from year to year with delayed appropriations and the like.

NASA's Human Space Flight and Aeronautics programs have experienced their fair share of instability over the past several years. And, yet those programs have managed to remain well within the accepted standards.

Can you give me a differentiation between that and some of the other programs?

Mr. GOLDIN. Yes, sir. Again, the key here is that the Human Space Flight accounts are programs that are a decade or more. They are very, very long term and by nature have more stability to them now that we have redesigned the Space Station. I might say that we had a different situation before that.

In the Aeronautics account, a large portion of the aeronautics work is done internal to the NASA organization. That gives it another level of stability where we are really driven by the number of people we have on the program.

In the Science accounts, we have a very large number of small grants and small contracts. And, let me give you a sense about this.

On the shuttle, as I pointed out before, we had a stable labor force, month to month. But, now let's take a small contractor. You know, at one point in the contract, they may have one or two people. They will peak up to seven and they will come down to a few.

If we don't provide them an up front commitment, they will have a very terrible time keeping the funding stable and having the ability to perform on the contract. And, there are 7,000 contracts in the Science, Application and Technology account as compared to 500 in the Human Space Flight account.

Mr. DAVIS. Well, let me ask this. Does the size of the contractors, then, in the program, would it have an affect on the carryover levels, the size of the individual contractors?

Mr. GOLDIN. Yes.

Mr. DAVIS. The smaller contractors would require more funding up front than the larger contractors?

Mr. GOLDIN. Yes, because they don't have the resilience of a large corporation.

Mr. DAVIS. How do the furloughs affect those contractors?

Mr. GOLDIN. Oh, it is a very serious problem. I would like to ask Mr. Peterson to talk about that.

Mr. DAVIS. I have a number of them out in our area, and I—

Mr. PETERSON. Well, when we were in the period over the last few months, the large contractors, of course, you know, work with a certain amount of float in terms of their outlays that they need to make for payroll and all. The small contractors don't have that kind of bank account.

They can't afford to be out there with liabilities against their accounts. And, so they require the funding assurance that a larger contractor is able to sort of tolerate the government's instability.

Now, one of the points I would make right now is just looking at this fiscal year, we are radically behind our obligation plan compared to other years. We are so much below our obligation plan that we look at it and we are not sure what our actual costing and out-laying for this fiscal year are going to be.

The amount of instability introduced into the system is quite considerable this year.

Mr. DAVIS. A small contractor who had a furlough of a week in November, three weeks in December, do they ever make that up? Do they end up eating that?

Is there a way they can work with you to perform the work a little faster and make that up over time?

Mr. PETERSON. We tried very hard during the furlough to make sure that all the small contractors were forward-funded; that is, had sufficient obligations on contract to cover their anticipated costs over the intervening period. There are a number of cases, particularly during the December period, where the furlough went on for quite a while that we actually had to bring in people into our finance shops in order to pay some of these small contractors, because they were about ready to go under.

Mr. DAVIS. Right. I can't believe it would have been the intent of Congress even though the budget impasse to put these people out of business.

And, so you were more proactive. NASA was more proactive than groups like EPA and others that, in some cases, had money available but didn't fund the contractors.

Mr. PETERSON. I can't speak to EPA, but I know our attitude toward having contract disruptions and work stoppages as being unproductive.

Mr. DAVIS. Because if the contractor goes under, then you've got to go back and start from scratch, right?

Mr. PETERSON. That's correct.

Mr. DAVIS. And, it becomes more expensive. Let me just—one more question. Are you satisfied with the estimated carryover reductions proposed for NASA programs through the next year, especially for Space Science, Mission to Planet Earth and the Life and Microgravity Sciences?

Mr. GOLDIN. Not yet. We want to really take the time—as the gentleman from the GAO said, we need to look at this some more.

We want to take the time to understand and consult with the Congress, to consult with this committee and make sure we all understand where we are going. This is a very important metric that we are developing. We didn't have it before at NASA.

And, the fact that Mr. Peterson put out that memo and said that you must justify any uncoded carryover eight weeks is going to bring the conscience level of the agency up. And, we will share that communication with this committee.

Chairman SENSENBRENNER. The gentleman's time has expired. The gentleman from Florida, Dr. Weldon.

Mr. WELDON. I thank the chairman. And, I do want to thank the chairman for holding this hearing.

I think this hearing is very important. And, I, as well, thank Mr. Goldin and your staff for coming in.

I know for me, in my district, with the significant downsizing in the manpower structure at Kennedy Space Center that occurred in the early 90s, to see very large carryovers of unspent funds in some of these other programs when people have been laid off, it's very difficult to explain. And, I do appreciate you coming here.

I'm getting a little bit confused, though, because it sounded like what we were hearing at the beginning was that you are going to try to get to this two to three month carryover level, but what we are also hearing is that maybe that's totally not practical for some of these other programs. Is that right?

Mr. GOLDIN. Yes. And, let me take, as a case in point, the academic programs. And, this is not unique to NASA. The National Science Foundation and any government organization that works with the university community has this issue.

So, in the broader context, if we want to get that number down, we are going to have to take some policy change at the national level to deal with it. So, I don't believe—we only can improve it. But, we are not going to improve it a factor of two.

So, yes, we are talking about, hopefully, getting NASA to a three month average. There may be some above and some below. But, that is our goal.

Mr. WELDON. Now, is this part of what you are calling cost-based budgeting that you are planning on implementing?

Mr. GOLDIN. That is one of the other corrective actions that we are taking. In some of the areas, we have been in obligation-based budgeting.

And, we are trying to transition our programs to cost-based budgeting. It turned out that a number of years ago, the Aeronautics enterprise went from obligation-based budgeting to cost-based budgeting and they were able to reduce the level of their uncosted obligations.

So, we are asking each of the enterprises to look at making this transition.

Mr. WELDON. Can you or your staff just explain to me a little bit what the difference is in those two and what impact that is going to have on your ability to handle your carryovers?

I assume we are going to get some sort of different budget from you in the future. And, when would that be submitted to us?

Mr. GOLDIN. Oh, I think you are referring to full-cost accounting, which is another issue. Let me ask Mr. Holz to answer your question and then I will come back to the issue you just referred to.

Mr. WELDON. Okay.

Mr. HOLZ. The question concerns the difference between obligation budgeting versus cost budgeting. Obligation budgeting, I guess the best way to describe it is, I have an authorization which is based on funding and I am going to contract to get the work done, so that the authorization covers the amount of the contract that will take me to the end of the product.

And, this is different from cost-based, because in cost-based I am more concerned about what actual costs will be incurred during a fiscal year. And, contract periods may go beyond.

So, it's a phasing issue as to when you recognize the need for the appropriation. And, most of our projects—a lot of our projects are based on contractual obligations.

If you drive more towards a cost-based budgeting, you still will need to take into account elements of risk in the project so that when you estimate forward what costs you are going to incur in that fiscal year you had better have some contingency built in for risks that you can't anticipate at the outset. So, there may still be some carryover even with cost-based budgeting.

But, the one is more—the cost-based is tied to costs you expect to incur in a fiscal year, where obligation-based is more linked to a contract which may not be tied to a fiscal year.

Mr. WELDON. Okay.

Mr. HOLZ. I hope that clarifies it a little bit.

Mr. WELDON. Yes, it does.

Mr. GOLDIN. I think what you were referring to is total cost accounting. We had a circumstance where many people in industry and universities complained that when NASA ran, if you will, a make/buy decision, should we do it in-house at NASA or go outside to contract it, there was an unlevel playing field. That is, NASA would not bid the overhead costs.

So, when a university would say, "Why are you doing this in-house when you should be having an outside grant," or "Why didn't NASA win this grant in the peer review," we had an unfair advantage. So, we are going to include all factors—overhead, facilities and other such factors—so there will be a very level playing field and NASA will not unduly bring activities in-house that should be done in universities and industry.

Mr. WELDON. I thank the chairman.

Chairman SENSENBRENNER. Thank you, Dr. Weldon. I have one wrap-up question, if I could.

I have calculated that a three month uncosted carryover for Mission to Planet Earth is \$356 million. And, the carryover balance, according to the GAO report, on September 30th of 1997 is \$630.9 million.

What would happen to the program if we cut the appropriation by \$250 million to bring it down to the \$356 million for fiscal 1998?

Mr. GOLDIN. We would, I believe, make it through 1997. But, in 1998 we would have to add more money to it.

And, let me give you a few examples of how that will manifest itself. We had a protest on the common spacecraft buy that delayed us by eight months. We also, with an interaction with this committee, did a number of trades on how we should approach the radar altimeter mission, the so-called Topex Poseidon follow-on. That is \$100 million of uncosted carryover, because we didn't have any activity going on.

That work has to be done. If NASA did its job in a traditional manner, we would have slipped the schedule eight months on the common spacecraft buy, and we would have slipped the schedule almost a year on the altimeter. And, I said no way are we going to do that, because that would have resulted in a much larger overall program cost. And, I said we are going to hold the end dates.

So, we are going to hold the contractor's feet to the fire and say even though we are starting the contract eight months late, we are going to deliver on time to the original schedule. So, if we took the money out in 1997, if we didn't want the end date to slip, we would have to put it back in in 1998.

Chairman SENSENBRENNER. In other words, what you are saying, Mr. Goldin, is that the uncosted carryover figure for Mission to Planet Earth is going to be significantly down in 1998 because you are going to spend the money for these two programs then?

Mr. GOLDIN. It is going to come down. Now, the one thing I do want to say is we want to spend some time and fully understand it.

Now, if we see that we have too much uncosted carryover, we plan to come forward to this committee and establish in the operating plan that we could turn back some money. Now, in prior years, we had worked with the Appropriations Committee and reduced—we had reduced our funding level by \$90 million in one year, as I recollect, and \$29 million in another year on uncosted carryover in the Mission to Planet Earth account.

So, I don't want to say that, you know, we would be able to take out zero dollars. But, I am saying we are trying to understand it more completely and we will communicate with this committee when we have that data.

Chairman SENSENBRENNER. I will be very disappointed if after that money is spent that the uncosted carryover doesn't go down.

If there are no further questions, thank you, Messrs. Goldin, Peterson and Holz for your very illustrative testimony. We look forward to working with you to help resolve this problem.

And, the subcommittee is adjourned.

[Whereupon, the hearing is adjourned at 11:33 a.m., Thursday, July 18, 1996.]

[The following material was received for the record:]

RESPONSES TO QUESTIONS SUBMITTED BY THE HONORABLE F. JAMES SENSENBRENNER, JR. FOR THE GENERAL ACCOUNTING OFFICE

Question 1:

Your statement shows the uncosted balances in NASA programs decreasing in amount from FY96 to FY97.

- Is NASA's spending plan on track to meet these goals?

Answer 1:

At the end of our review, some programs were projecting carryover balances at the end of fiscal year 1996 that were different than the estimates in the report attached to our statement. The carryover balances shown in the report were based on NASA estimates of budgets and cost for fiscal year 1996 and 1997. As final program budgets and actual costs become known, it is likely that the balances will change—increasing for some programs and decreasing for others. For example, actual costs accrued during the first 8 months of FY96 for the Mission to Planet Earth program were less than planned. NASA officials told us that based on these figures, they are projecting total costs accrued for the program in 1996 to be less than planned. If this turns out to be the case, the carryover balance at the end of 1996 will increase from the 1995 amount, rather than decrease as shown in the report. A higher amount carried over from 1996 could affect the balance at the end of 1997. However, this will ultimately depend on the final budget for 1997 and actual costs accrued during the year.

Question 2:

How is the American taxpayer affected by the practice of carrying unused balances from year to year? Does this mean that the government collected money from taxpayers and then didn't actually use the funds?

Answer 2:

Some level of carryover is necessary to conduct government programs. Carryover beyond that which is necessary to conduct programs could possibly be applied somewhere else that might result in a more immediate benefit to the American taxpayer. This is a matter for the Congress to decide. Further analyses and benchmarks discussed in the answer to question 8 could help determine appropriate carryover levels. Concerning the second question, the direct answer is no. For many years, the government's budget outlays have exceeded total receipts.

Question 3:

Have any programs within NASA experienced problems with uncoded balances in the past? If so, how have those problems been addressed?

Answer 3:

Our work focused on fiscal years 1995 - 1997. Our analysis shows that a number of NASA programs had high carryover balances at the end of fiscal year 1995. One program, Aeronautical Research and Technology provided additional information on carryover balances back to 1989. Answers to questions 4 and 5 provide information on how this program addressed its high carryover balances.

Question 4:

According to your testimony, the Aeronautical Research and Technology (AR&T) program maintained a relatively low carryover compared to other NASA programs.

- How was this accomplished?
- Does this program manage its budget more effectively than other NASA programs?
- If the lower carryover balances are the result of better management, can methods used by AR&T be applied to other NASA programs?

Answer 4:

Over the three years that we reviewed, AR&T has one of the lowest carryover rates among Science, Aeronautics and Technology programs. According to AR&T officials, this is the result of a decision 6 years ago to more effectively manage carryover and a strong management commitment to keep these balances to a minimum. In 1990, AR&T undertook a detailed examination of the nature of its carryover balances. As a result, AR&T established metrics for levels of carryover; implemented information systems to monitor carryover balances by centers, projects, and contracts; and instituted a process for applying funding where it could be most effectively used in a particular fiscal year. Many of the actions AR&T has taken over the past several years will need to be taken elsewhere in NASA. Aeronautics financial managers believe that some of the information systems and techniques they used to reduce and man-

age their carryover balances could be applied to other NASA programs.

Question 5:

Why did the officials in the Aeronautics program feel it necessary to reduce the carryover? Did headquarters notice that the Aeronautics managers were working to reduce carryover while other managers in other areas were not?

Answer 5:

Aeronautics officials gave two overriding reasons for reducing carryover balances. First, carryover balances were the first place headquarters budget officials looked when they needed to make budget cuts and, in the late 1980's, Aeronautics funding was reduced because of its high carryover balances. Second, Aeronautics officials view cost as a measure of work accomplished. Therefore, their goal is to get as much work accomplished and costed as possible in a given fiscal year. According to Aeronautics officials, headquarters budget officials released more funding to their programs earlier in the fiscal year because they had a track record of being able to cost it efficiently.

Question 6:

How did NASA view uncosted carryover funds prior to the start of the study?

Answer 6:

NASA has always looked at carryover balances a place to make budget adjustments when necessary, but it was not until this year that an effort was made to thoroughly analyze and manage carryover balances. Just prior to the start of our study, NASA became concerned about its large balances of unliquidated budget authority, which includes unobligated funds and uncosted obligations. NASA initiated an internal study and officials told us that the Subcommittee's interest added considerable weight to the importance of the study and the need to better manage carryover balances.

Question 7:

Should the size of NASA's contractors affect its carryover balances?

Answer 7:

NASA has stated that smaller contractors require more carryover than larger contractors. According to NASA, this partly explains why Science, Aeronautics and Technology programs, which have large numbers of smaller contractors, have relative higher carryover balances than the Human Space Flight programs, which have fewer but larger contractors. The relationship between the size of a contractor and the amount of carryover required needs to be studied as part of the further analyses discussed in question 8. Also, the relative mix of contractors in each program needs to be looked at carefully. For example, although Mission to Planet Earth involves a large number of smaller contractors, it also has contracts with some of the aerospace industry's larger companies, such as Lockheed Martin, TRW, Hughes, Loral, Aerojet, and Ball.

Question 8:

Will you be able to determine appropriate levels of carryover for individual programs through further analysis?

Answer 8:

Further analysis should provide more insight into the causes of carryover balances in individual programs. This improved insight should enable NASA to develop benchmarks for each program, indicating the level at which it needs to justify balances and where the Congress may have flexibility in the timing of budget authority provided to individual programs.

RESPONSES TO QUESTIONS SUBMITTED BY THE HONORABLE F. JAMES SENSENBRENNER, JR. FOR THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

QUESTION 1:

Will NASA provide comprehensive information about its actual and planned level of uncoded carryover to this Committee in its future budget requests?

ANSWER 1:

NASA currently makes its financial plan and performance record widely available to the Congress, the OMB, the Treasury and the public. This information is provided in the President's budget request to Congress, information provided for the record in response to requests from the Committee, in NASA's annual audited financial statement, and in a variety of routine reports submitted regularly. Information on NASA's uncoded balances is one element of NASA's entire financial picture. NASA will continue to provide all information the Committee feels is required.

QUESTION 2:

If programmatic and fiscal change have led to delays in spending all of the dollars appropriated for a program, why hasn't NASA reduced its budget request for the next year to take these delays into account?

ANSWER 2:

As I testified to the Committee, NASA has been able to absorb funding reductions in the Mission to Planet Earth program in recent years in part, because of the level of unobligated funding. In the FY 1996 appropriations cycle, the Mission to Planet Earth reduced its budget requirement \$90 million based on the delayed program schedule. NASA program managers are constantly evaluating program schedules against funding requirements. In some program areas, the ability to accommodate the funding reductions that have been experienced over the past several years is due, in part, to the availability of unobligated funds. Funds not spent are aligned with future requirements, reducing outyear budget requests.

QUESTION 3:

Johnson Space Center's report showed that Mission to Planet Earth finished FY 1993 with an uncoded balance of \$564 million, which grew to \$695 million at the end of FY 1995 and will be at least \$631 million at the end of FY 1997.

Will the agency reduce its budget request for Mission to Planet Earth for FY 1998 to use this unspent balance?

ANSWER 3:

The budget planning for the Mission to Planet Earth is based on careful planning of the technical requirements of the program. This balance reflects a mix of activity, including funding for the Earth Observing System flight and ground program as well as a significant amount of scientific research. In the Earth Observing System program, the level of uncosted obligations in the program has been building based on the significant program restructuring the program has undergone and the general trend toward larger unobligated balances experienced in early phases of development programs. In the area of research and analysis activities, a lag in the commitment and obligation of funds is driven by the peer review process and university financial management practices. The uncosted balance for Mission to Planet Earth is expected to be significantly lower in FY 1998, however this will not necessarily translate into a reduction in planned funding requirements. As I testified to the Committee, an appropriate uncosted balance is an essential element of good program management. NASA is continually examining the unobligated and uncosted balances of all its programs. If our analysis shows funding reductions are possible, those reductions will be incorporated into future budget requests.

QUESTION 4:

The Comptroller's screening criteria requires specific justification of carryover balances larger than 8 weeks worth of next year's estimated cost.

What action do you envision taking if the justification for a large carryover is inadequate?

ANSWER 4:

Any analysis of adequate uncosted carryover levels involves consideration of a myriad of programmatic, technical, and administrative characteristics of NASA's programs. No unilateral answer exists that can be applied to all programs. The benchmark of eight weeks was established by the NASA Comptroller to begin a discussion for each program area as to what the adequate level should be. Budget requests for all areas of the NASA program will be aligned with programmatic requirements.

QUESTION 5:

Are you planning on taking any steps to hold those programs that have carryover exceeding 15% - 25% of their annual budget accountable for their future plans to reduce carryover balances?

ANSWER 5:

NASA managers are accountable for all funding decisions. Programs comprised largely of scientific work at universities, for example, executed by annual grants with start dates throughout the year will have higher uncosted than industrial contracts for operational work. No single answer applies.

QUESTION 6:

In the past, NASA has indicated that it has achieved significant cost savings through program restructuring, pointing to declining budget requests as evidence of the savings.

To what degree were these budget reductions the result of innovative management and technology or reductions in the amount of uncosted funds that would be accumulated from year to year?

ANSWER 6:

The Earth Observing System (EOS) program has experienced program restructuring nearly every year since program start. The budget estimates for this program through FY 2000 have been reduced more than 50%. The changes in the program content have been profound. The original EOS program was a series of huge platforms with a large number of instruments that could only be launched on the largest launch vehicles. The current EOS program is a series of much smaller spacecraft planned to use the full suite of NASA launch capabilities, including the smallest. By any metric, the budget reductions are clearly the result of innovative management and technology. As these program restructurings have occurred, budget reductions have accommodated carryover from funds already appropriated by offsetting, lowering, future budget requests.

QUESTION 7:

Will the recommendations of the recently completed CFO-directed study be implemented? If so, when can we expect to see the first complete cost-based budget submission from NASA?

ANSWER 7:

Implementation of all the recommendations of "The Management and Liquidation of Budget Authority" report are underway. In programs where formulation of budget estimates based on cost-based budgeting is appropriate, this approach will be incorporated into the FY 1998 budget submission. We will continually evaluate our approach to estimating budget requirements to achieve the most accurate results.

QUESTION 8:

Why did officials in the Aeronautics program feel it necessary to reduce their carryover? Why didn't headquarters notice that these managers were working to reduce carryover while managers in other areas were not? Why haven't other programs taken the initiative to reduce carryover?

ANSWER 8:

NASA managers closely monitor the obligation and expenditure of all NASA funds. The increasing level of uncosted carryover across the agency has been under close scrutiny for some time, and in fact, several actions were underway by the NASA Chief Financial Officer at the time this issue was raised by the Committee to reduce the uncosted funding level. A proper level of uncosted funding is required for responsible program management. NASA management is aggressively an understanding of the needs of all of NASA's individual programs, to ensure that the requested budget authority for the whole agency can be defended.

RESPONSES TO QUESTIONS SUBMITTED BY THE HONORABLE SHEILA JACKSON-LEE FOR THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

QUESTION 1:

With respect to uncosted carryover, some have expressed concern that NASA might be "padding" its budget requests to avoid the consequences of future fiscal direction from Congress and the Administration. How would you respond to such a charge?

ANSWER 1:

There is no substance to the claim that the unobligated and uncosted balances represent any kind of "hedge" against future budget reductions. NASA's track record in responding to recent budget reductions has been exemplary. The performance of the agency has rested on its ability to cut program content, significantly reduce its staffing level, and become much more efficient in performing its mission. The reforms NASA has instituted in recent years will be instrumental in the agency's ability to meet budget reductions that are already planned in the future.

QUESTION 2:

Did you take your uncosted balances into account when you developed your FY 1997 budget? If so, how?

ANSWER 2:

NASA carefully considers a variety of factors, including the unobligated and uncosted balances, when it formulates its budget estimates. Technical and schedule status, as well as manpower planning are significant drivers in planning budget estimates for NASA's research and development activities. In addition, a proper level of uncosted funding must be planned into all program activities as part of responsible program management. All these factors are considered in the course of arriving at NASA's budget requests.

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